

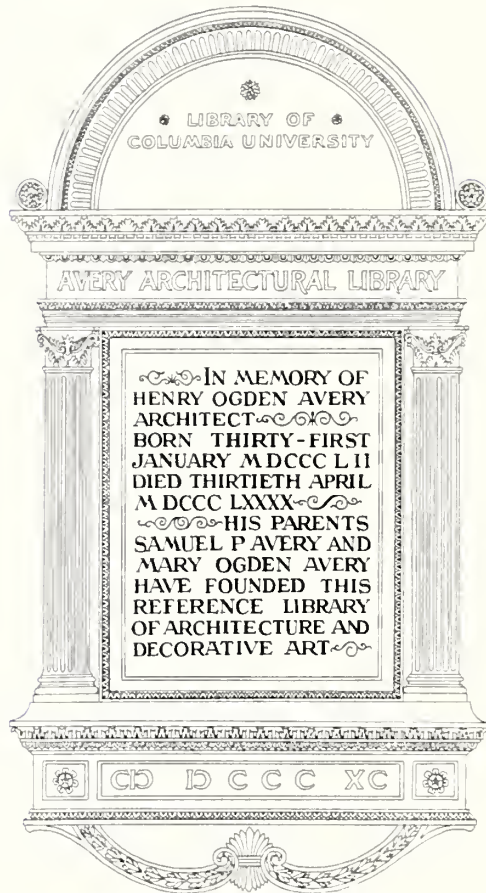
SCHERPE<sup>AND</sup>KOKEN,

IRON WORKS,

ST. LOUIS, MO.

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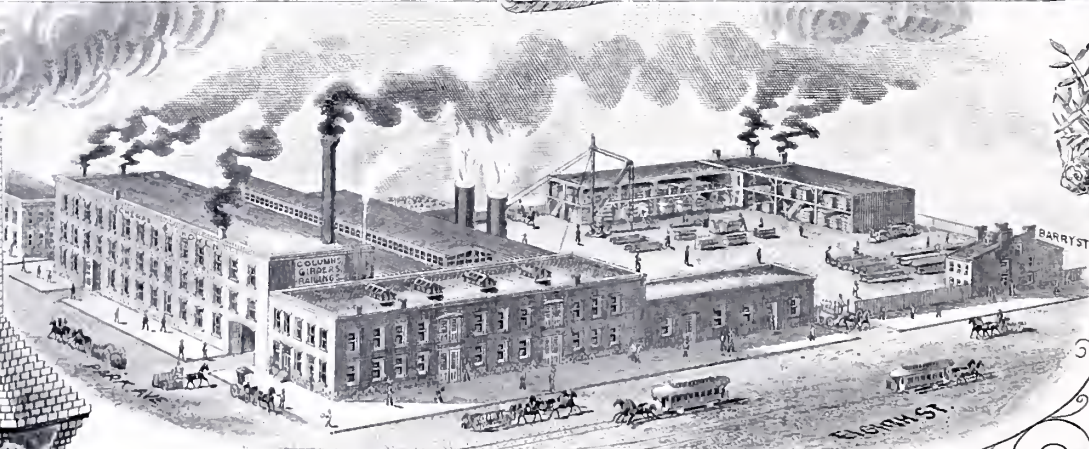
ENTERPRISE  
ARCHITECTURAL

AND ORNAMENTAL

IRON  
WORKS  
& FOUNDRY

**SCHERPE & KOKEN**

PROPRIETORS.



5.8<sup>TH</sup> STR. PARK AVE. & BARRY ST.  
ST. LOUIS,



JOHN F. SCHERPE.

WM. T. KOKEN.

—♦— ENTERPRISE —♦—

# Architectural Iron Works & Foundry.

—♦— OFFICE OF —♦—

## SCHERPE & KOKEN,

SOUTH EIGHTH STREET ST. LOUIS, MO.  
AND PARK AVE.

MANUFACTURERS OF ALL KINDS OF

### Plain and Ornamental Cast and Wrought Iron Work

FOR BUILDINGS AND STRUCTURES OF EVERY DESCRIPTION.

Iron Fronts, Columns, Pilasters,  
Lintels, Sills, Cornices,  
Gratings, Window Guards,  
Caps and Sills,  
Sash Mullions, Sash Weights,  
Front Railings,  
Balcony Railings and Brackets,  
Cemetery Railings,  
Roof Crestings and Finials,  
Wrought Iron Fences,  
Iron Doors and Shutters,  
Fire Escapes,

Bank Vaults and Vault Entrances,  
Iron Stable Fixtures and Fittings,  
Gratings,  
Illuminating Tiles,  
Iron Stairs (straight and circular),  
Iron Roof Trusses,  
Shoes, Rods,  
Bolts and Washers,  
Girders, Beams,  
Flitch Plates, Anchors,  
Ventilators,  
Corner Guards, &c., &c.

### IRON JAIL WORK A SPECIALTY.

ALSO MANUFACTURERS OF

Dale's and Jacob's Celebrated Patent Concrete Illuminating Tile.

Jacob's Patent Wrought Iron Illuminating Doors.

Hyatt's Tile and Jacob's Illuminating Roof Lights.

ESTIMATES PROMPTLY FURNISHED UPON PUBLIC OR PRIVATE WORKS AND BUILDINGS.

PROMPT DELIVERY AND FIRST-CLASS WORK WARRANTED AT LOWEST RATES.

THE FOLLOWING STREET CAR LINES LEAD TO THE WORKS:

6th and Market Street Cars going South,  
5th Street Cars going South,

4th Street Cars going South,  
Union Depot Cars on Pine St. going West and South.

---

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ST. LOUIS, NEW YORK AND CHICAGO,  
AUGUST GAST BANK NOTE AND LITHOGRAPHING COMPANY.  
1887.

## OUR MOTTO.

ALWAYS TO EXCEL.

Always to meet—if possible anticipate, the requirements of the present progressive age.

—o—

## ADDRESS.

In presenting this, our latest Illustrated Catalogue, 1887 edition, we beg to state that we have spared neither pains nor expense to make it attractive, and at the same time a *durable book of reference* designed especially for the use of

### Architects, Builders and Contractors,

Containing as it does, besides the large number of original designs, representing some of our newest and most popular patterns, much other information pertaining to the Architectural branches; we trust it may be found of frequent practical use and benefit.

Our Foundry, Pattern and Finishing Shops and Forges, as heretofore, are in the hands of the ablest and most skillful mechanics, under the direct supervision of the individual members of the firm; which, with an extensive experience and the aid of all the latest and most approved machinery and appliances, secures to us the most economical and the best practical results obtainable—enabling us to compete successfully with any market, and explains to some extent the flattering success evinced by the growing demand for our work.

Notwithstanding the frequent and important additions to our works made within the last seven years, we found it necessary again to increase our capacity, and having recently purchased a large piece of adjoining property, have just completed additions to our Foundry and the various other buildings, which increases our capacity fully threefold—gives us a floor and ground area of over 50,000 square feet, and makes our establishment now the most complete, and perhaps largest works, of any west of the Allegheny mountains, devoted exclusively to the Architectural Iron branches.

Zealously determined to maintain our pronounced reputation for honorable dealing, for the most rigid compliance with and performance of every requirement of contracts entrusted to us; for prompt delivery and highest standard of excellence as to workmanship and materials at lowest possible prices, we hope to merit a continuance of the good-will and patronage enjoyed heretofore.

Parties desiring to build stores, or use Iron Work of any description, either on public or private improvements, will find it to their interest to consult us before placing their orders.


Any information or suggestions, desired in our line, always cheerfully given.

Correspondence solicited and promptly attended to.

Respectfully,

SCHERPE & KOKEN,  
St. Louis, Mo.

—o—

 All our work is finished with a heavy coat of oil and mineral paint, which prevents corrode or rust, and forms a good priming coat for subsequent painting and ornamentation.

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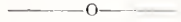
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## IRON STORE FRONTS.



The following illustrations represent only some of the Patterns we have on hand, selected for having by their adaptability to the general wants, as well as for their originality and architectural beauty, already gained much popular favor.

We have an endless variety of Patterns on hand, but are by no means limited to them in taking orders. Our pattern shops, like the other departments, are most complete in their arrangement, and keeping a large force of pattern-makers continually employed, we are fully prepared to make new patterns, and can produce work according to original plans, in the shortest possible time.

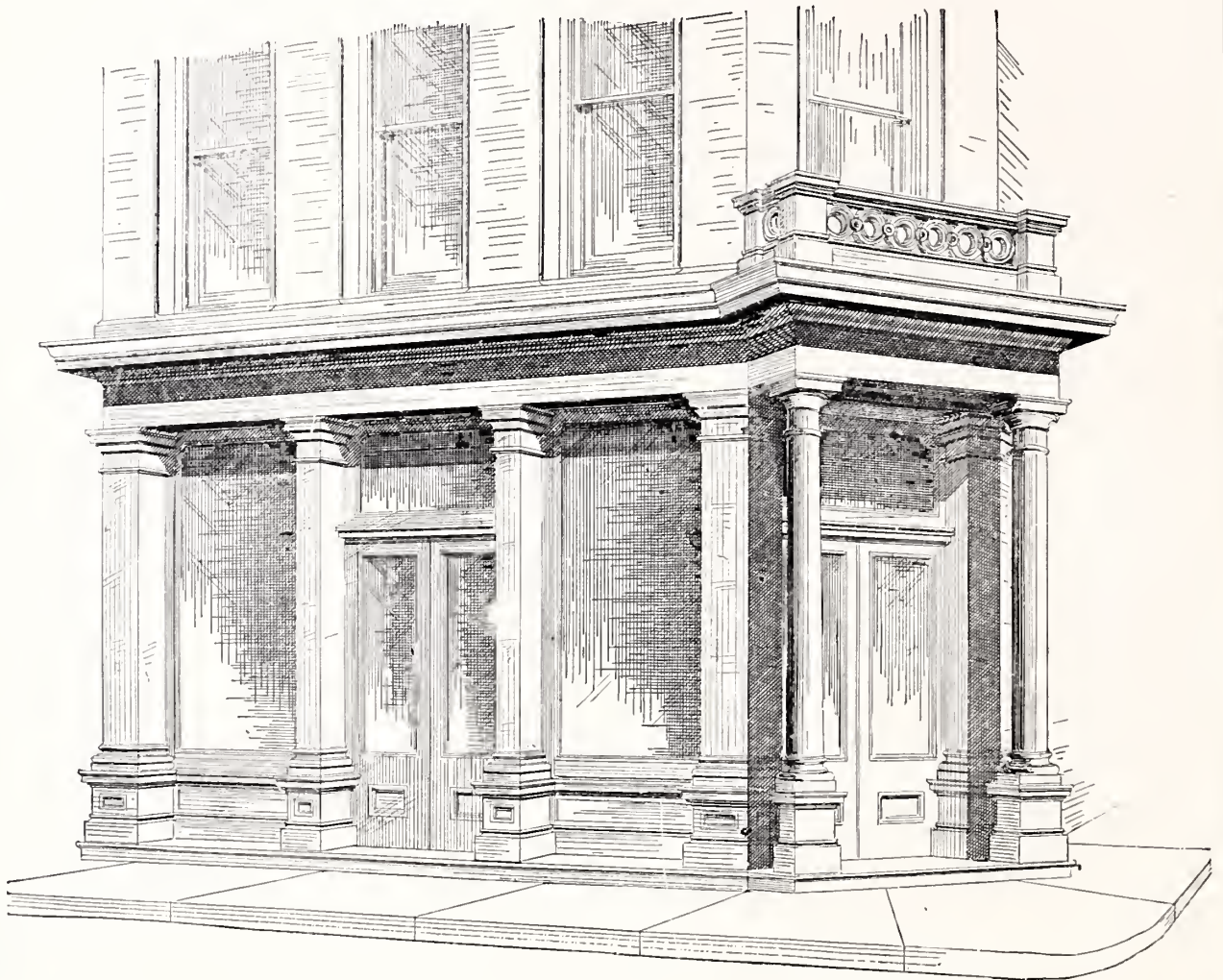
Where we are not expected to place work in position, as is often the case outside of the city, we would call attention to the fact that all work contracted for by us, is closely jointed and fitted together, as if in position, before leaving our works, and each and every part is so marked that any mechanic can, without trouble, set it in place exactly as required. As an additional precaution against errors or misunderstandings on the part of those setting up work where we are not represented, we send a copy of our working drawings, and a special description with each and every shipment, affording a complete guide for putting the respective parts in place as required.

Parties contemplating to build can therefore send orders for Iron Work without the least hesitancy arising from any fear of not understanding how to place same properly in position.

All requests for quotations should be accompanied by a sketch of ground plan and an approximate list of items, giving sizes, lengths, etc., viz: number and height of stories, thickness of walls, purpose for which building is intended, sizes of openings, designated as door, window or stairway, as the case may be. By giving descriptions and particulars as fully as possible, considerable time is often saved, besides enabling us to quote closest possible prices at once and give more satisfactory information or suggestions, generally.

The dimensions given on the illustrations are intended merely as a guide to show the sizes mostly used. They can be changed to any length, breadth or height that may be desired.

## IRON STORE FRONTS.



No. 1.

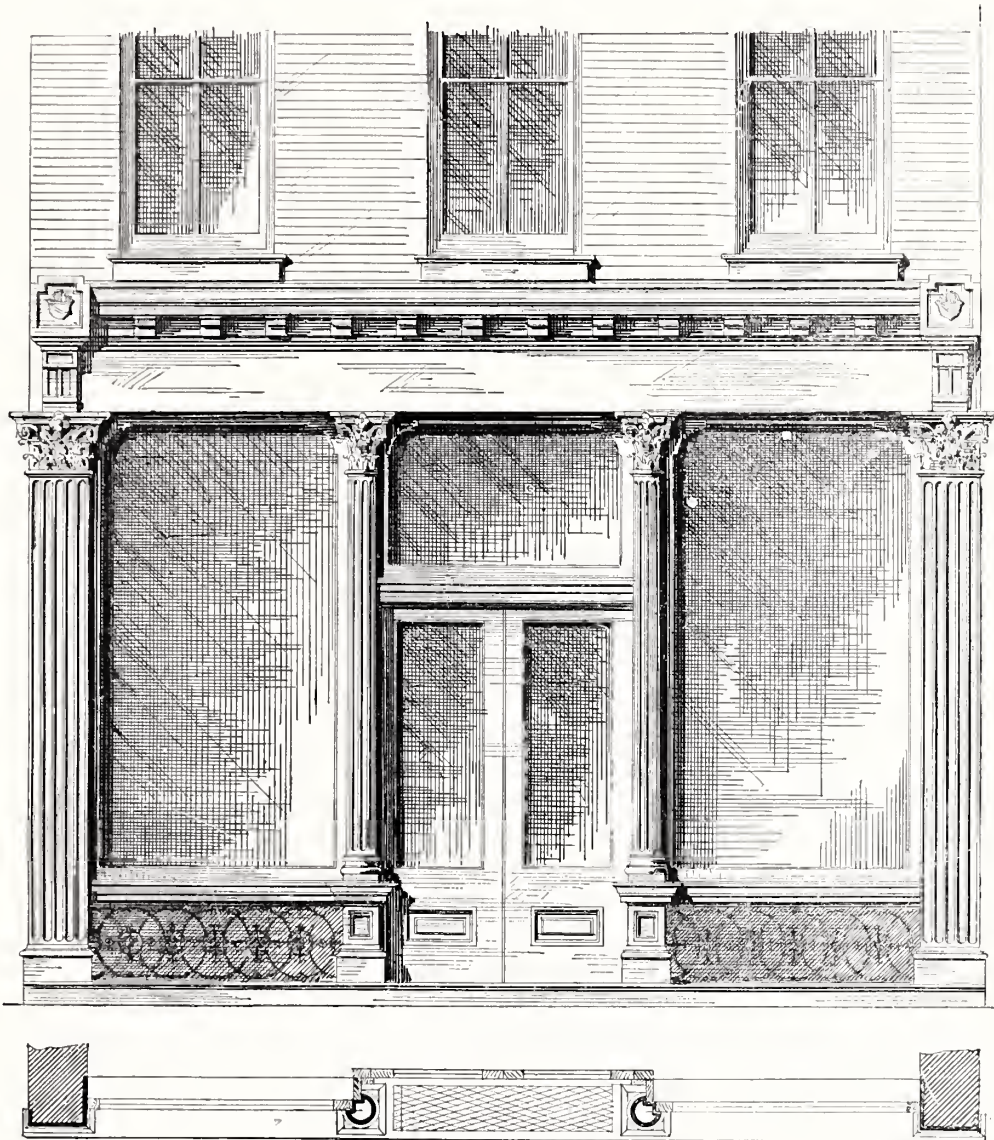
25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

## Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- One Three-Sided Column, 13 inches by 13 inches by any length.
- Two Three-Sided Columns, 10 inches by 13 inches by any length.
- Two Round Columns, 10 inches diameter by any length.
- Sill Course with Platform, as shown.
- Box Lintels, 18 inches by 13 inches by 6 inches, as shown.
- Molded Cornice, as shown.
- Balcony Guard, as shown.



## IRON STORE FRONTS.



No. 2.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Round Corinthian Columns, 6 in. diameter, with Box Pedestal Base, any length.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- Box Lintel, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, any length, with two Stop Blocks, as shown.
- Grilles, under Show Windows, any length.

## IRON STORE FRONTS.



No. 3.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Pilasters, 13 inches by 13 inches by any length.
- Two Intermediate Columns, 6 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- Box Lintel, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, as shown, any length.



# IRON STORE FRONTS.



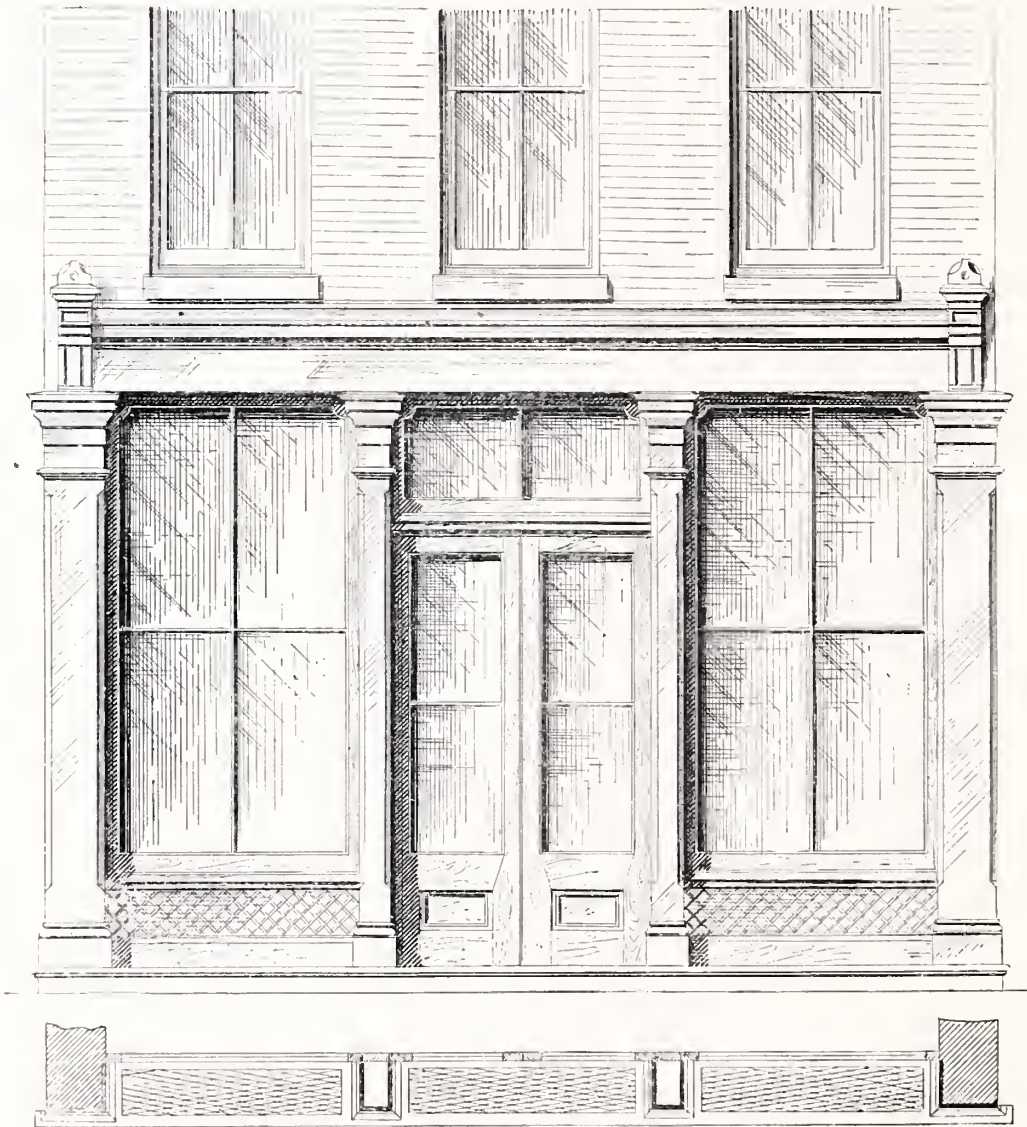
No. 6.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Three-Sided Columns, 6 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6 inch-riser, any length.
- Lintel Plates, 13 inches wide, any length.

## IRON STORE FRONTS.



No. 7.

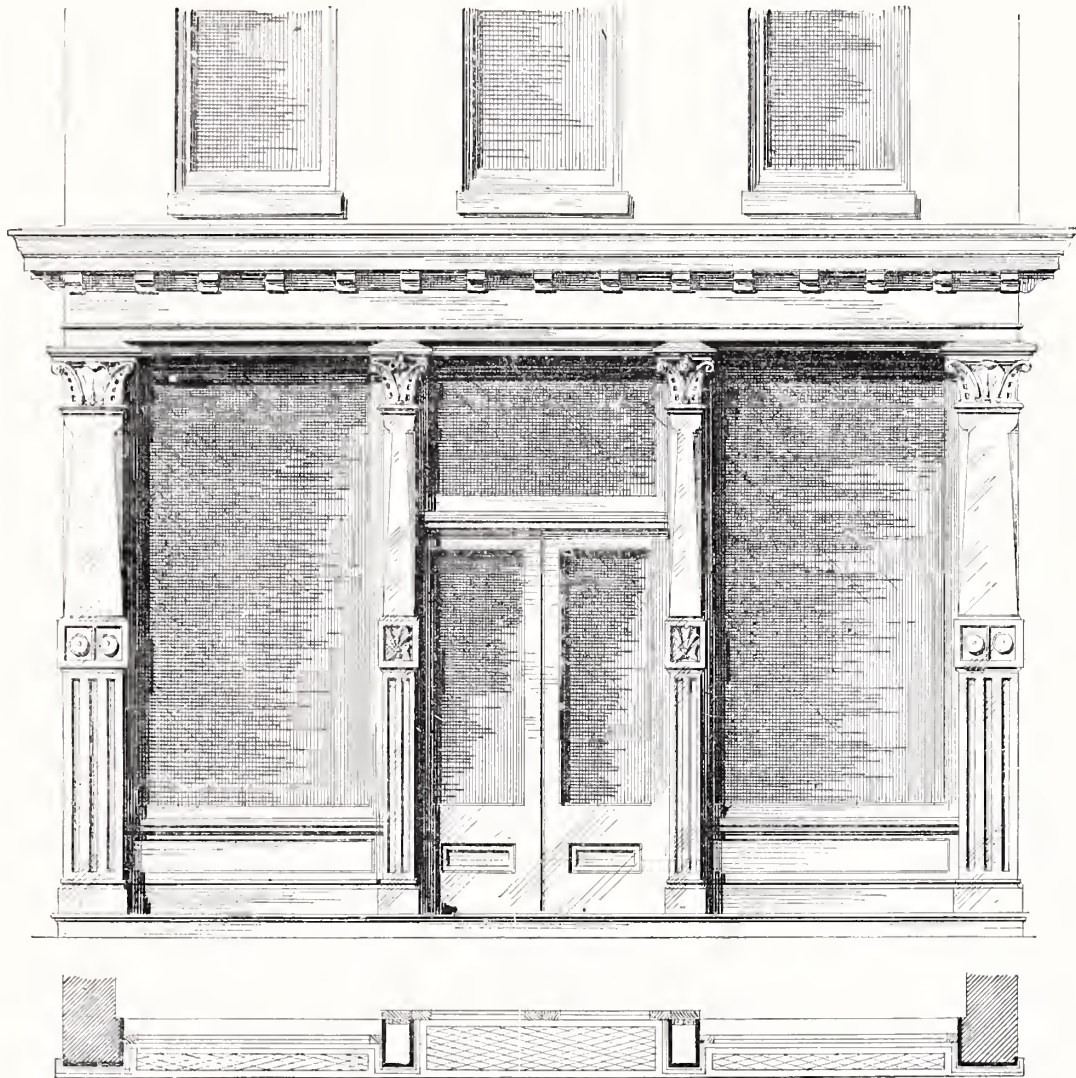
25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

## Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Three-Sided Columns, 6 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6 inch riser, any length.
- Box Lintel, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, as shown, any length, with Stop Blocks.
- Grilles, under Show Windows, any length.



## IRON STORE FRONTS.



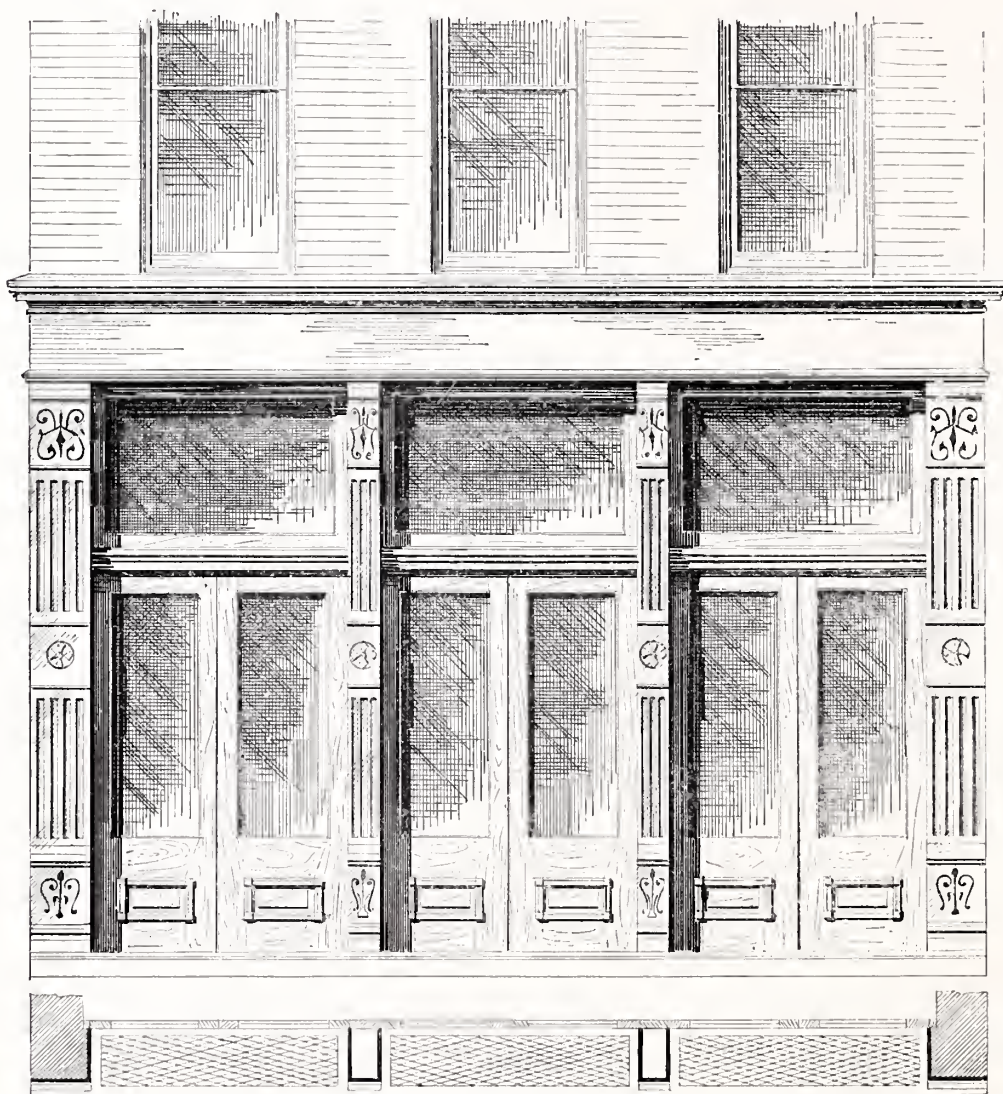
No. 10.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Intermediate Columns, 6 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6 inch-riser, any length.
- Box Lintel, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, as shown, any length.

## IRON STORE FRONTS.



No. 11.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Pilasters, 13 inches by 13 inches by any length.

Two Intermediate Columns, 6 inches by 13 inches by any length.

Sill Course, 15 inches wide, with 6-inch riser, any length.

Lintel Plate, 13 inches wide, any length.



## IRON STORE FRONTS.



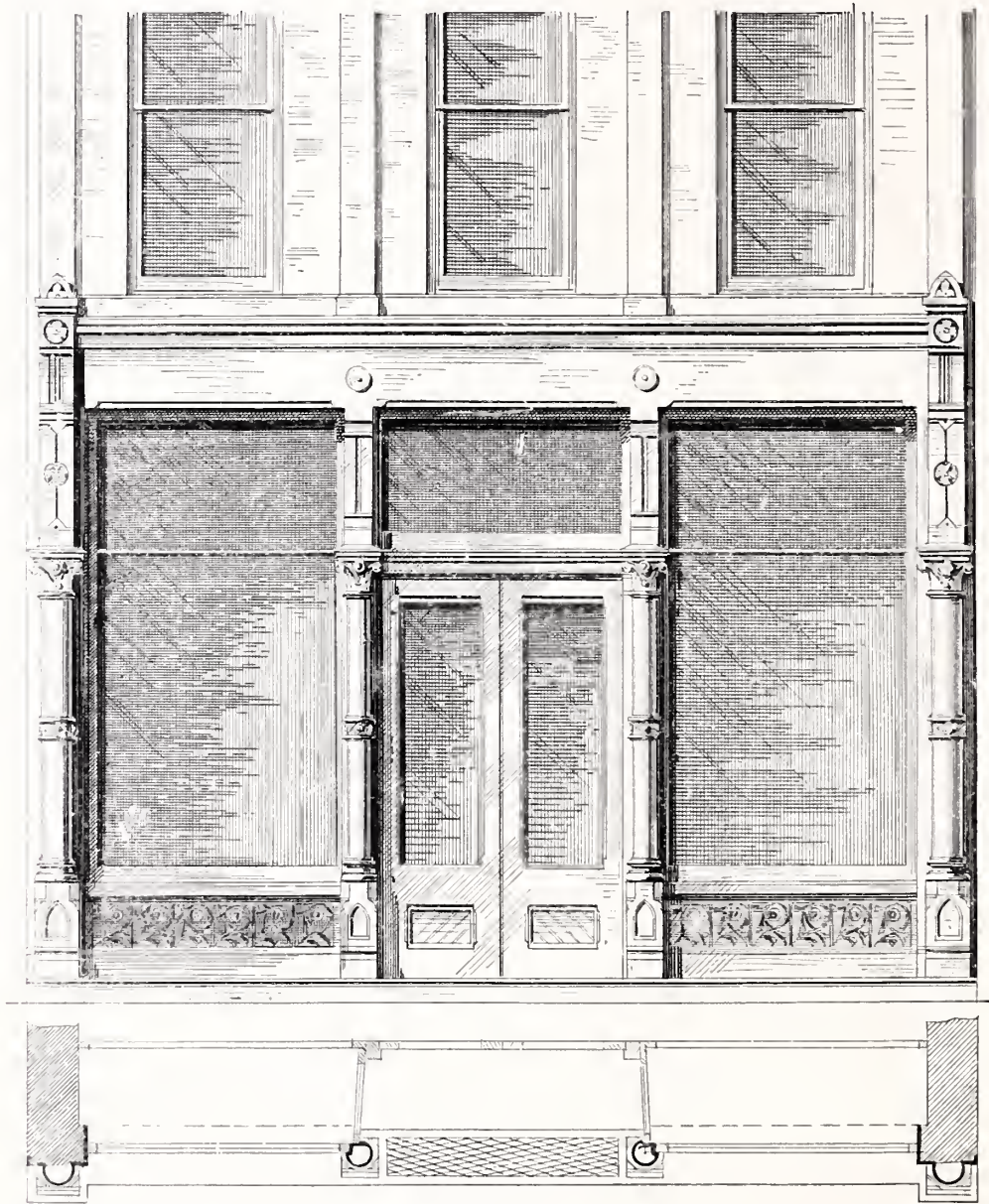
No. 14.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Three-Sided Columns, 6 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6-inch riser.
- Box Girder, 18 inches by 13 inches by 6 inches.
- Molded Cornice, with Stop Blocks, as shown.

## IRON STORE FRONTS.



No. 15.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 8 inches by any length.
- Two Three-Quarter Round Columns, 8 inches diameter by any length.
- Two Round Columns, 6 inches diameter by any length.
- Box Girder, 18 inches by 13 inches by 6 inches, any length.
- Molded Cornice, with Stop Blocks, as shown.
- Grilles, under Show Windows, any length.



# IRON STORE FRONTS.



No. 18.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- One Tension Rod Girder, 13 inches wide, any length.
- Grilles, under Show Windows, any length.

## IRON STORE FRONTS.



No. 22.

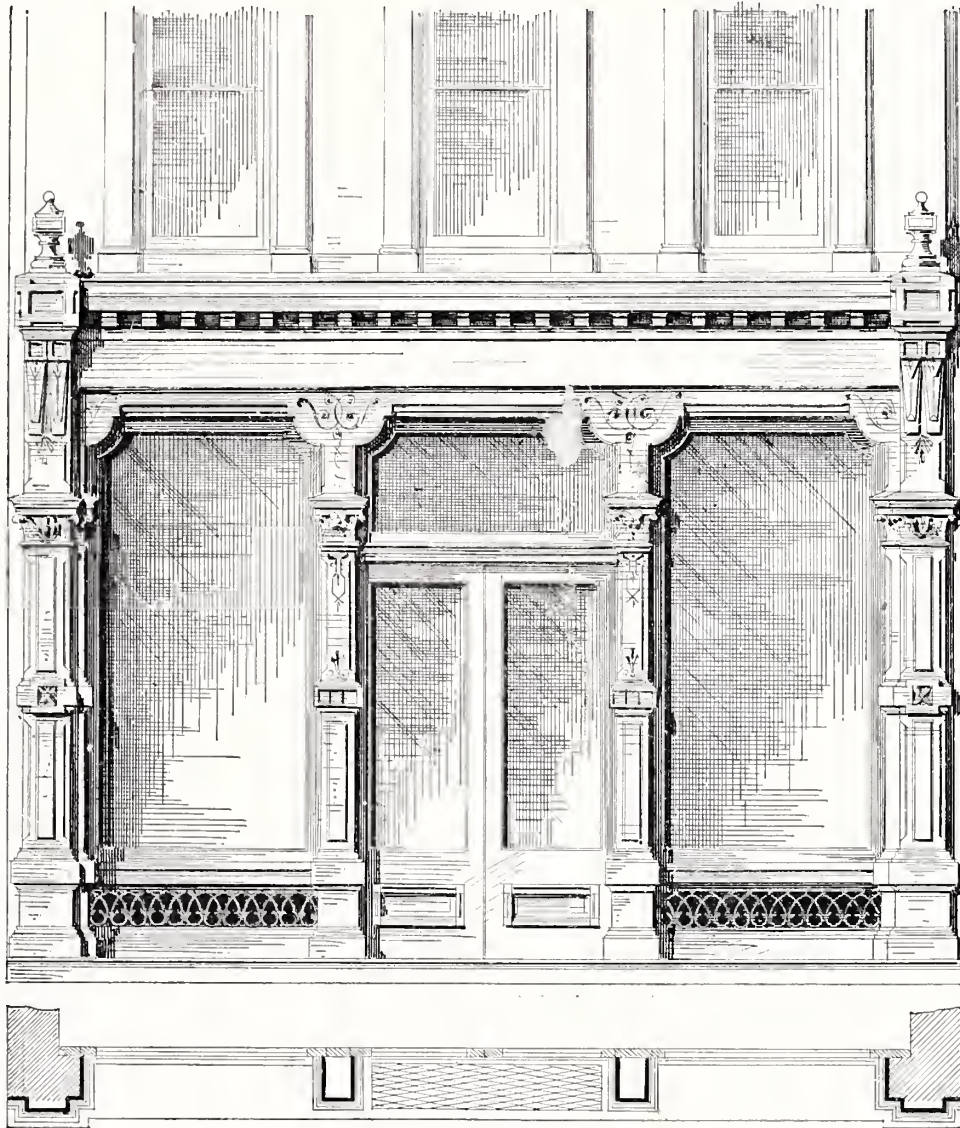
25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches, by any length.  
 Sill Course, 15 inches wide, with 6-inch riser, any length.  
 Tension Rod Girder, 13 inches wide, any length.  
 Grilles, under Show Windows, any length.



## IRON STORE FRONTS.



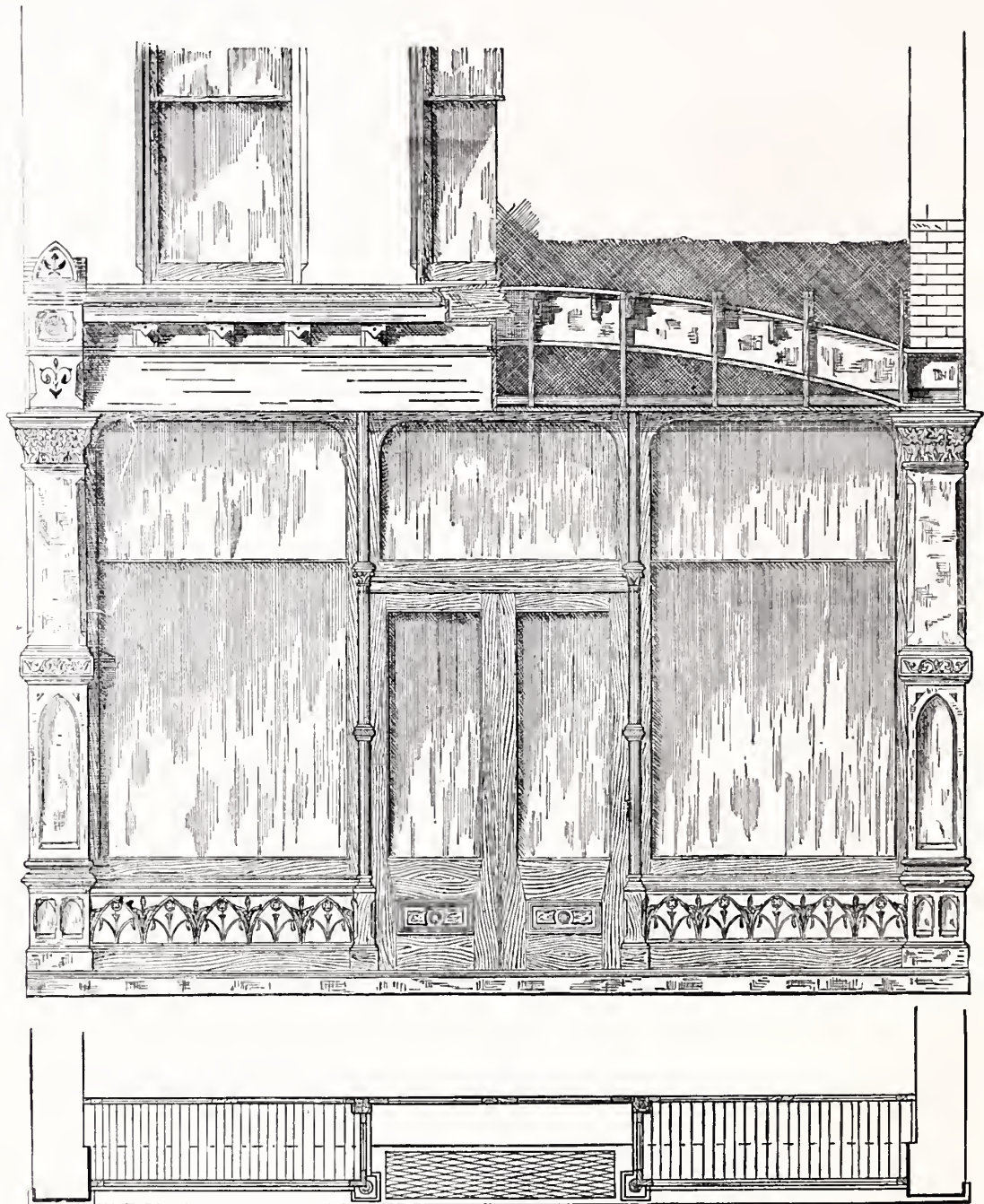
No. 23.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Pilasters, 13 inches face and 4 inches Reveal Plate, any length.
- Two Columns, 8 inches by 10 inches by any length, with Spandrels.
- Two Half Columns, 4 inches by 10 inches by any length, with Spandrels.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- Box Girders, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, with Stop Blocks, as shown.
- Grilles, with Cap and Base Moldings under Show Windows, any length.

## IRON STORE FRONTS.



No. 25.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

Two Angle Pilasters, 13 inches by 13 inches, any length.

Sill Course, 15 inches wide, with 6-inch riser, any length.

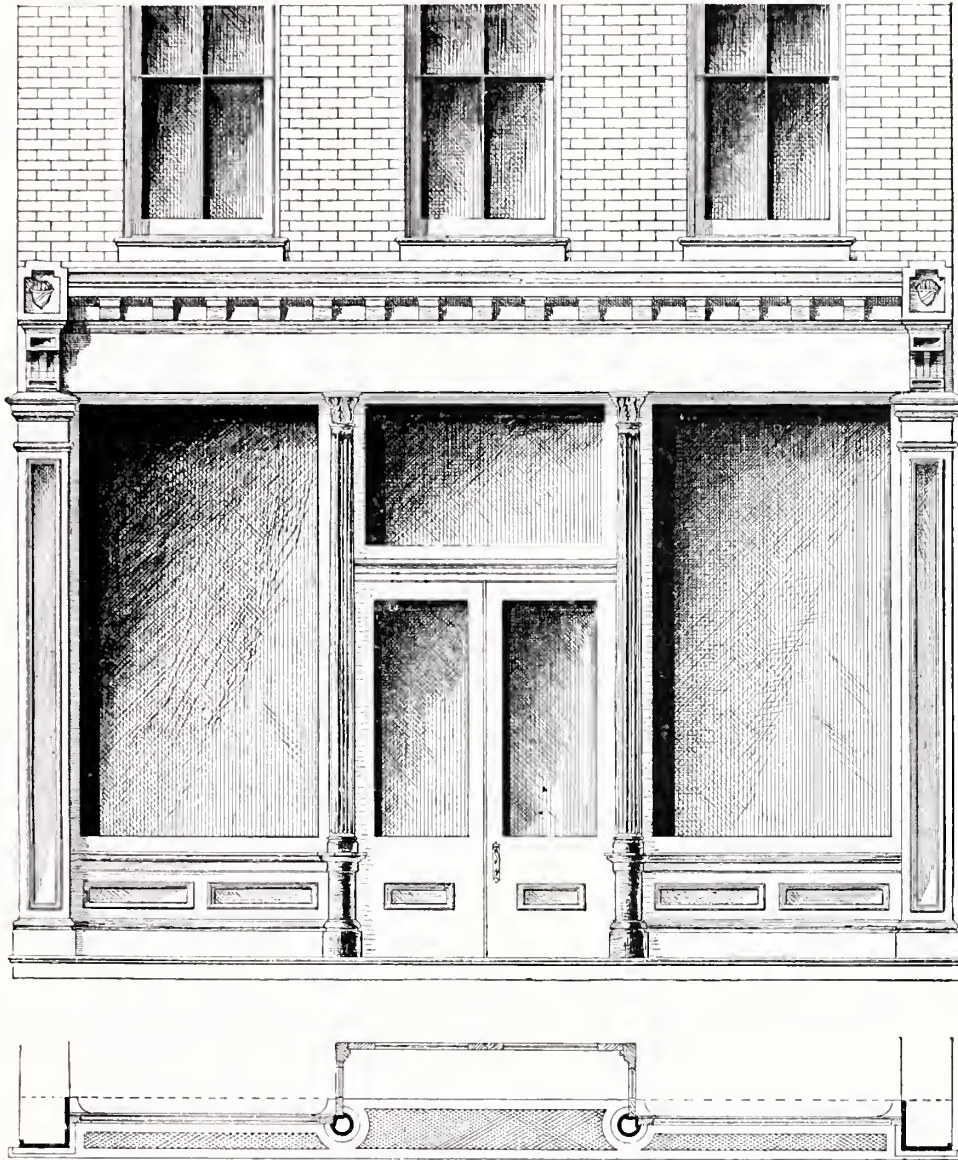
Tension Rod Girder, any length up to 30 feet.

Grilles under Show Windows, any length.

This front can be changed any time without shoring up the wall above.



# IRON STORE FRONTS.



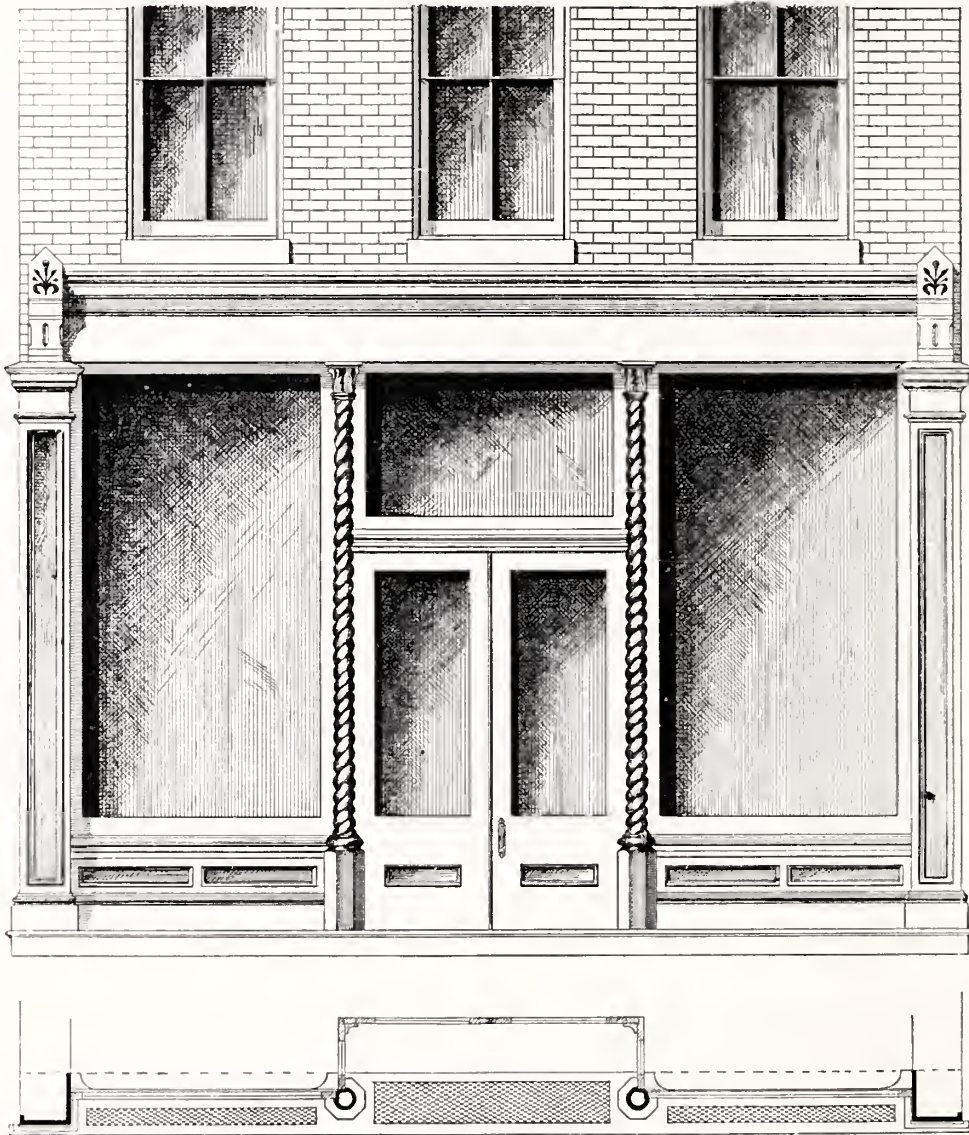
No. 26.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches, any length.
- Two Round Grecian Fluted Columns, 6 inches diameter by any length.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- Box Girder, 18 inches by 13 inches by 6 inches.
- Cornice any length, with Two Stop Blocks.

## IRON STORE FRONTS.



No 27.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Round Roped Columns, 6 inches diameter by any length.
- Sill Course, 15 inches wide, with 6 inch riser, any length.
- Lintel Plates, 13 inches wide, any length.



# IRON STORE FRONTS.



No. 28.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Angle Pilasters, 13 inches by 13 inches by any length.
- Two Three-Sided Columns, 6 inches by 13 inches by any length.
- One Round Column, 6 inches diameter by any length.
- Sill Course, 15 inches wide, with 6-inch riser, any length.
- Box Girders, 18 inches by 13 inches by 6 inches, any length.
- Cornice any length.



## IRON STORE FRONTS.



No. 29.

25 FEET WIDE WITH COLUMNS 12 FEET HIGH.

Consists of

- Two Pilasters, 13 inches by 13 inches by any length.
- Two Intermediate Columns, 6 inches by 13 inches, by any length.
- Sill Course, 15 inches wide, with 6 inch riser, any length.
- Box Lintel, 18 inches by 13 inches by 6 inches, any length.
- Modillion Cornice, any length, with Two Stop Blocks.
- Grilles under Show Windows any length.





No. 30.

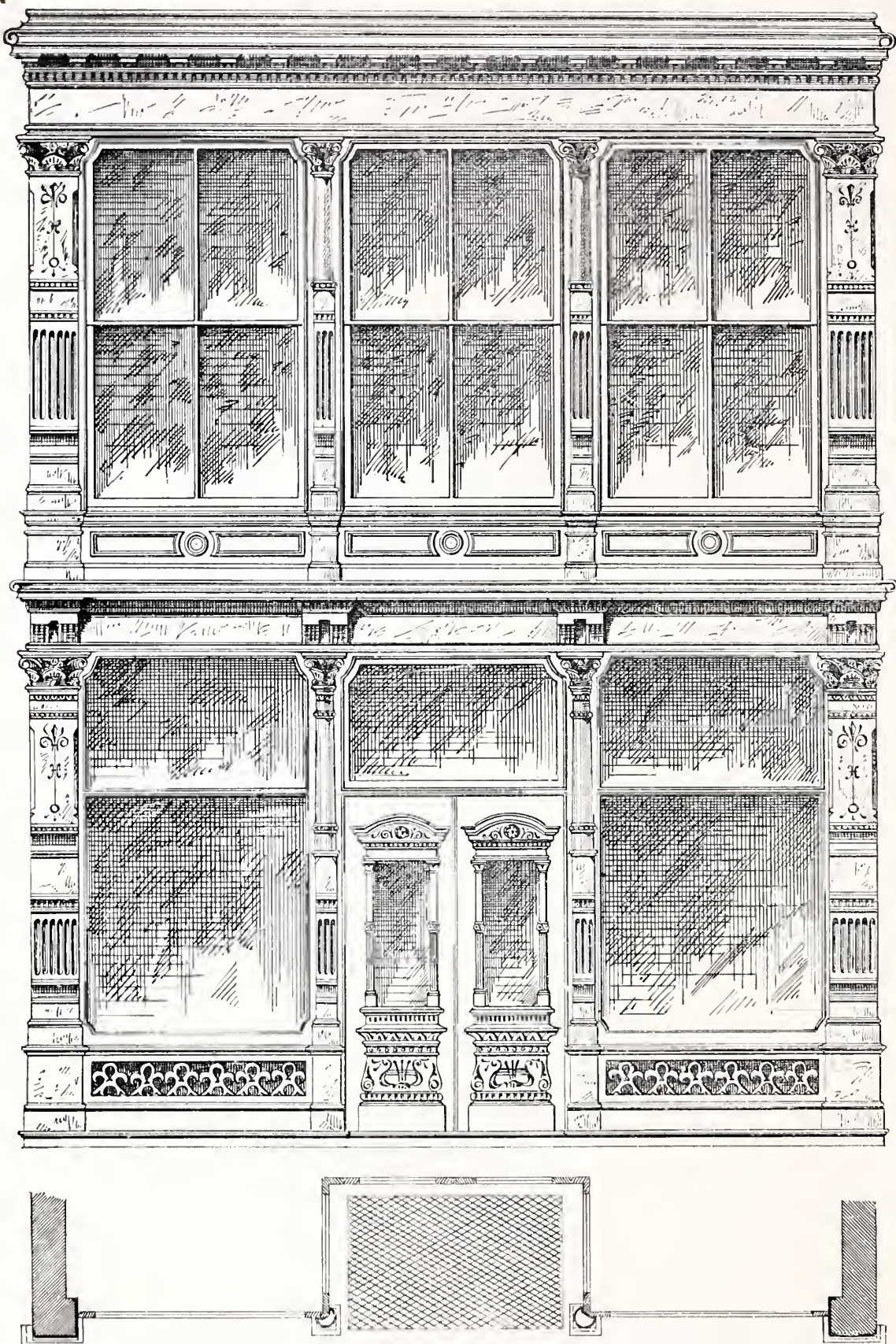
25 FEET WIDE WITH FIRST STORY 14 FEET AND SECOND STORY 12 FEET IN CLEAR.

Consists of

- 2 Pilasters, 13 in. by 9 in., any length, in both stories.
- 3 Columns, 6 in. by 9 in., any length, in first story.
- 3 Columns, 6 in. diameter, any length, in second story.
- Box Girder, 18 in. by 9 in. by 6 in., any length, first story.

- Modillion Cornice, with Stop Blocks, first story.
- Sill Course, 12 in. wide, with 6-inch riser, any length, first story.
- Sill Course, 12 in. wide, with 6-inch riser, any length, second story.
- Lintel Plates, 9 inches wide, any length, top of second story.
- Grilles under Show Windows, any length.





No. 33.

25 FT. WIDE WITH FIRST STORY 14 FT. AND SECOND STORY 12 FT. IN CLEAR.

**Consists of**

Two Pilasters, 13 inches by 9 inches, any length, in both stories.  
 Two Columns, 6 inches by 6 inches, with round upper shaft, any length, in first story.  
 Two Columns, the same in second story.  
 Box Girder, 18 inches by 9 inches by 6 in., any length, first story.

Cornice, with Brackets over first story.

Sill Course, 12 inches wide, with 6-inch riser, any length, with Vestibule Plates 3 feet wide, any length.

Sill Course, 12 inches wide, with 6-inch riser, any length, 2d story.

Lintel Plates, 9 inches wide, any length, top of second story.

Grilles under Show Windows, any length.





No. 34.

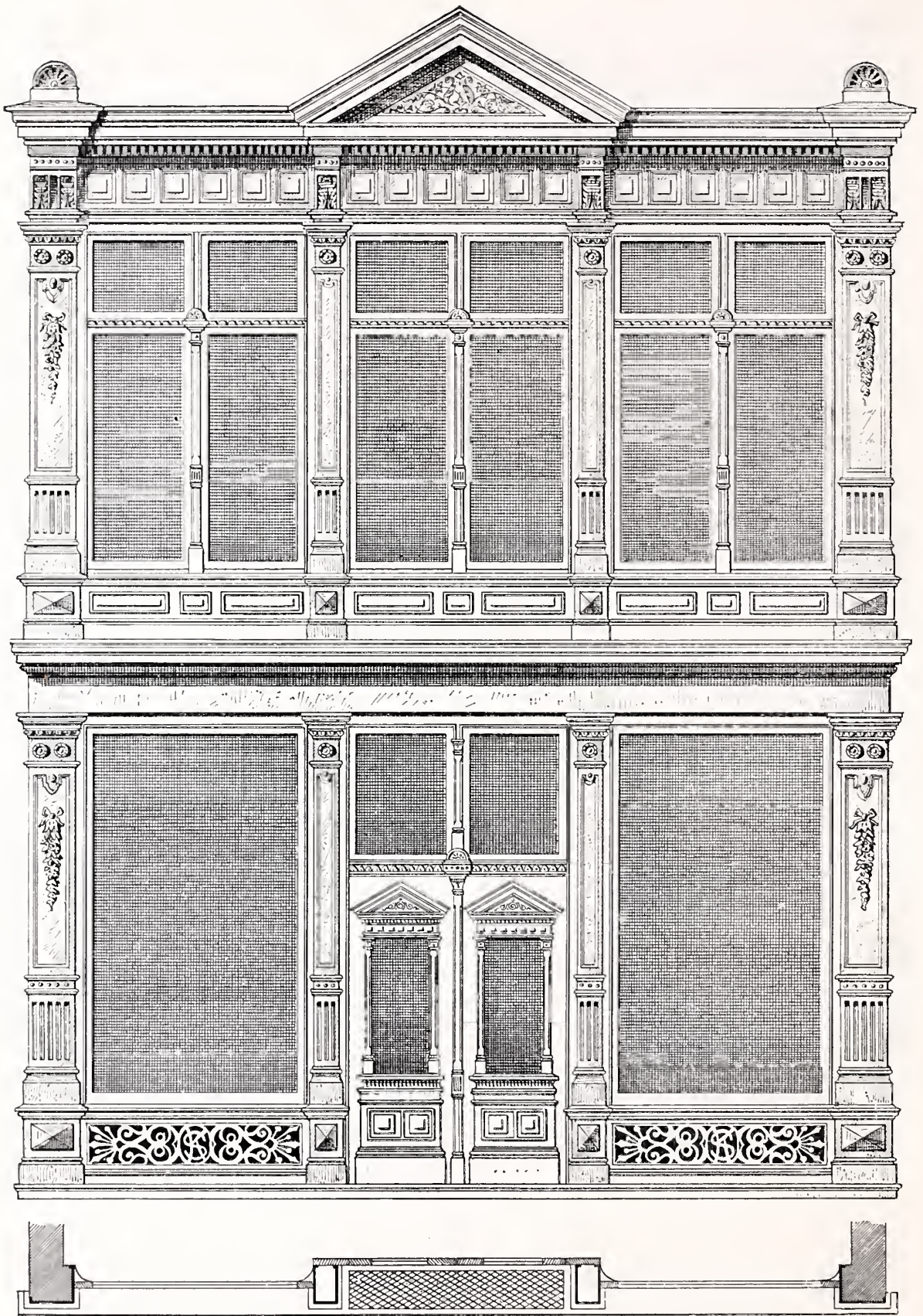
25 FT. WIDE. FIRST STORY 14 FT. AND SECOND STORY 12 FT. IN CLEAR.

Consists of

Two Pilasters, 13 inches by 9 inches, any length, in both stories.  
 Two Columns, 6 inches by 9 inches, any length, in first story.  
 Two Columns, the same, any length, in second story.  
 Box Girder, 18 inches by 9 inches by 6 in., any length, first story.

Cornice, with Stop Blocks, first story.  
 Sill Course, 12 inches wide, with 6-in. riser, any length, first story.  
 Sill Course, 12 inches wide, with 6-in. riser, any length, 2d story.  
 Lintel Plates, 9 inches wide, any length, top of 2d story.





No. 35.

25 FEET WIDE. FIRST STORY 14, AND SECOND STORY 12 FEET IN CLEAR.

**Consists of**

Two Pilasters, 13 inches by 9 inches, any length, in both stories.  
 Two Columns, 6 inches by 9 inches, any length, in first story.  
 Two Columns, the same, any length, in second story.  
 Box Girder, 18 inches by 9 inches by 6 in., any length, first story.

Cornice, first story.

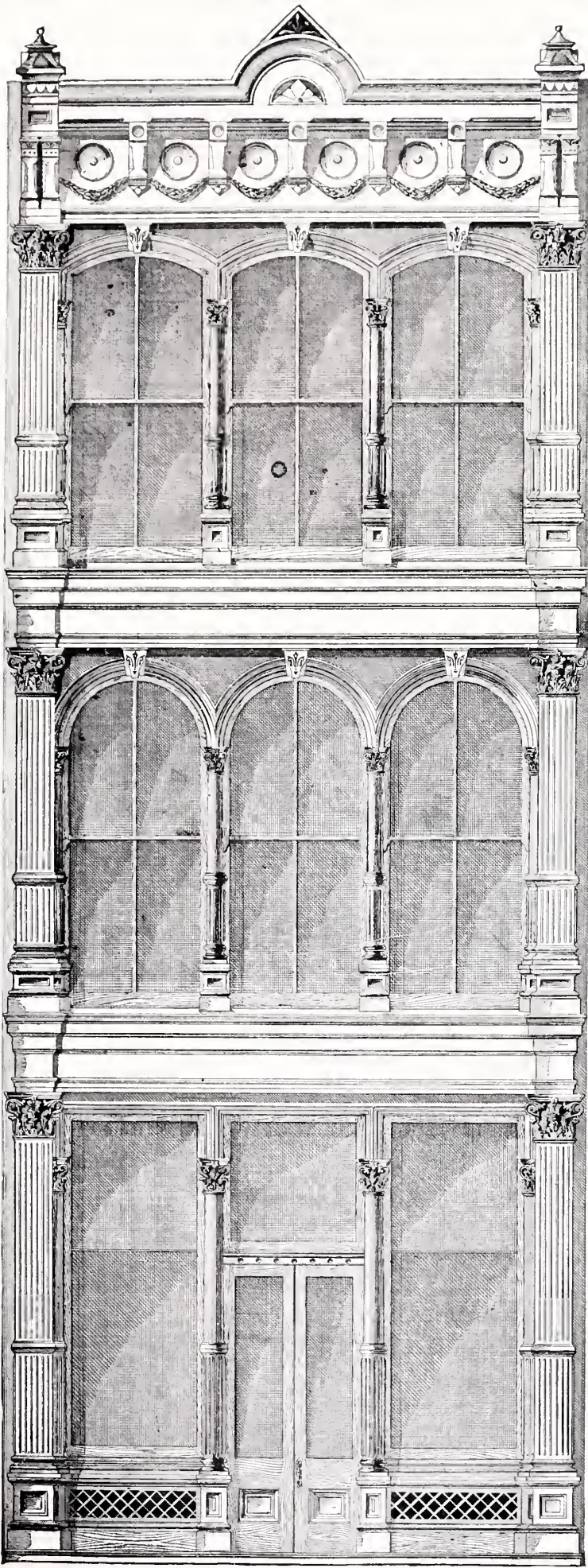
Sill Course, 12 inches wide, with 6-in. riser, any length, first story.

Sill Course, 12 inches wide, with 6-in. riser, any length, 2d story.

Lintel Plates, 9 inches wide, any length, top of second story.

Grilles under Show Windows, any length.





# No. 32.

Can be made any Height and Width.

25 FEET WIDE. FIRST STORY 19 FEET 6 INCHES; SECOND STORY 17 FEET 6 INCHES; THIRD STORY 16 FEET 6 INCHES CLEAR.

Consists of

Pilasters 18 inches by 18 inches, with Reveal Plate, three stories high, any length.

Two round and two half-round Columns, 10 inches diameter first story, any length.

Sill Course, 24 inches wide, with 6-inch riser, any length.

Three Spandrels with soffits in each story.

Grilles under Show Windows, any length.

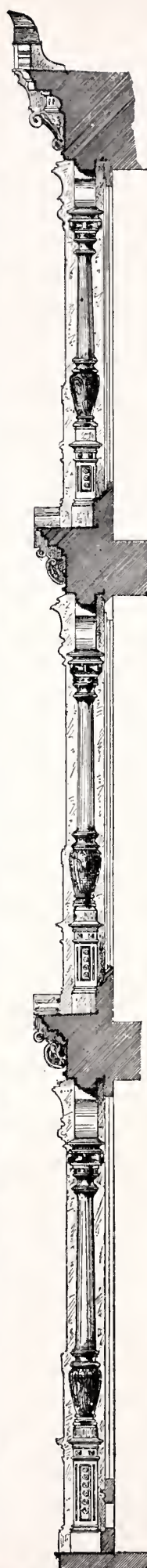
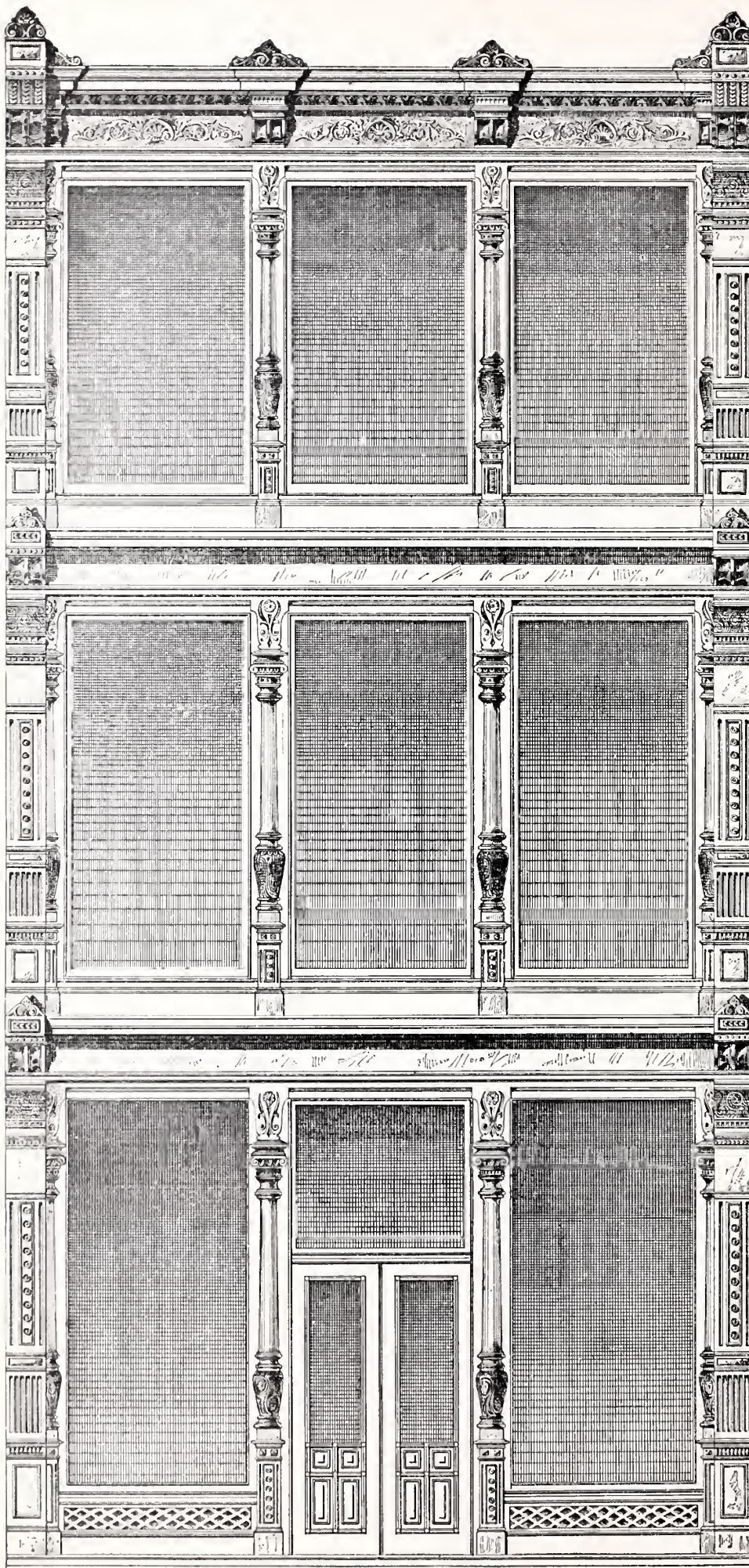
Box Girders, 24 inches by 18 inches by 6 inches, over first and second stories, any length.

Frieze Molding over first and second stories.

Cornice with wide top plate over first and second stories.

Lintel Plates 18 inches wide over third story, any length.





# No. 36.

25 feet wide. First story 16 feet 6 inches; second story 14 feet 6 inches; third story 13 feet 6 inches in the clear. Consists of  
 Pilasters 13 inches by 13 inches, three stories high, any length.  
 Two round and two half-round Columns, 8 inches diameter first story, any length.  
 Two round and two half-round Columns, 6 inches diameter second story and same in third.  
 Sill Course 15 inches wide, with 6-inch riser, first story.  
 Sill Course 12 inches wide, 6-inch riser, second and third stories.  
 Can be made any Height and Width.



## IRON COLUMNS, PILASTERS, ETC.,

### PLAIN AND ORNAMENTAL.

---

Our Stock of Column and Pilaster Patterns embraces an endless variety of beautiful and artistic designs, round, square and angular shaped, viz.: Corinthian Fluted, Grecian Fluted, Panel, Rope, Composite and Fancy Styles.

The illustrations on pages 28 to 36 represent some of the most recent and popular styles in stock, to which new ones are being continually added.

We can make CASTINGS from THESE PATTERNS on VERY SHORT NOTICE and are especially well equipped for GETTING OUT NEW PATTERNS after any drawings or designs that may be furnished.

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### CAPITALS ON PAGE 30.

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No. 1, Corinthian Capitals for Pilasters, any Diameter from 6 to 12 inches.

No. 2, Composite Capitals, any Diameter.

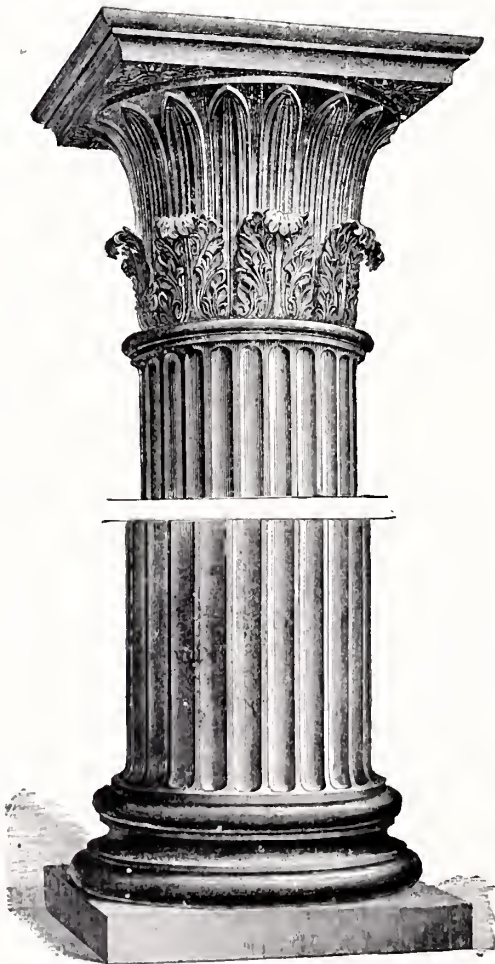
No. 3, Ionic Capitals any Diameter.

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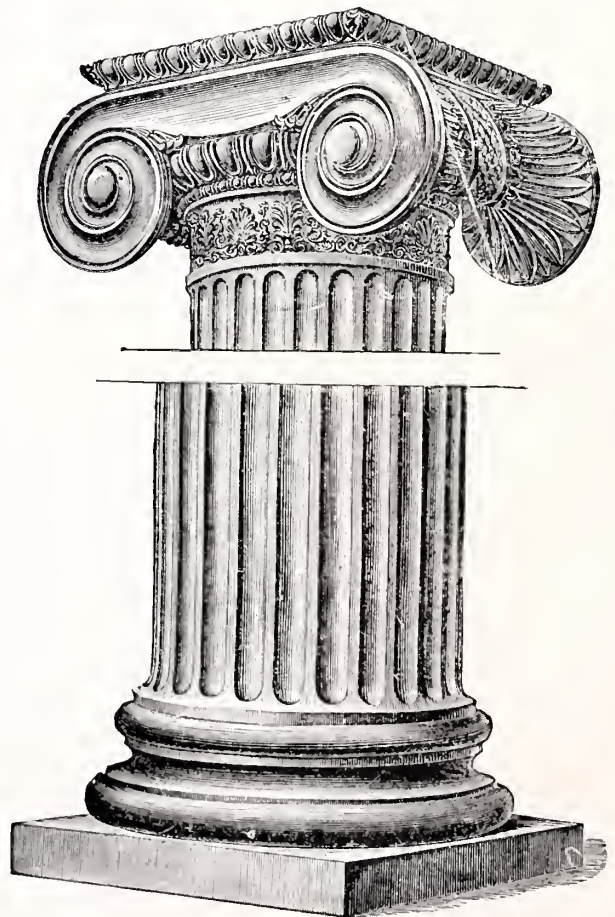
TABLES OF STRENGTH OF CAST IRON COLUMNS, PAGE 95.



No. 1.



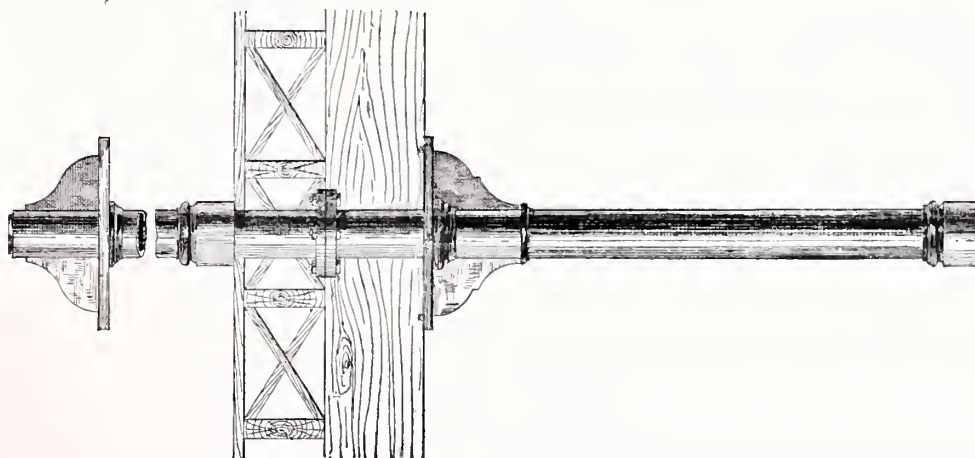
No. 2.



No. 3.

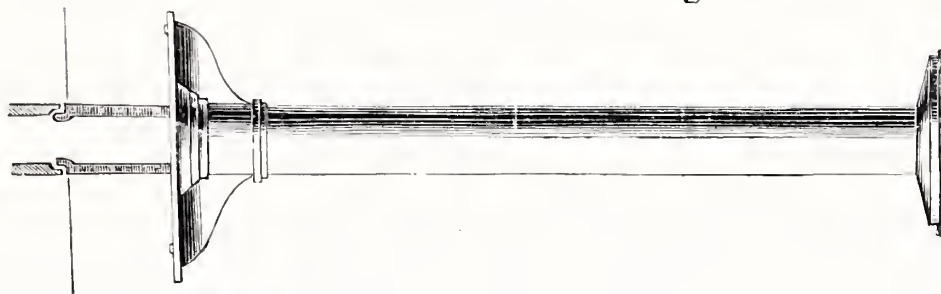
See page 29.

Tables of Strength of Cast Iron Columns, Page 95.



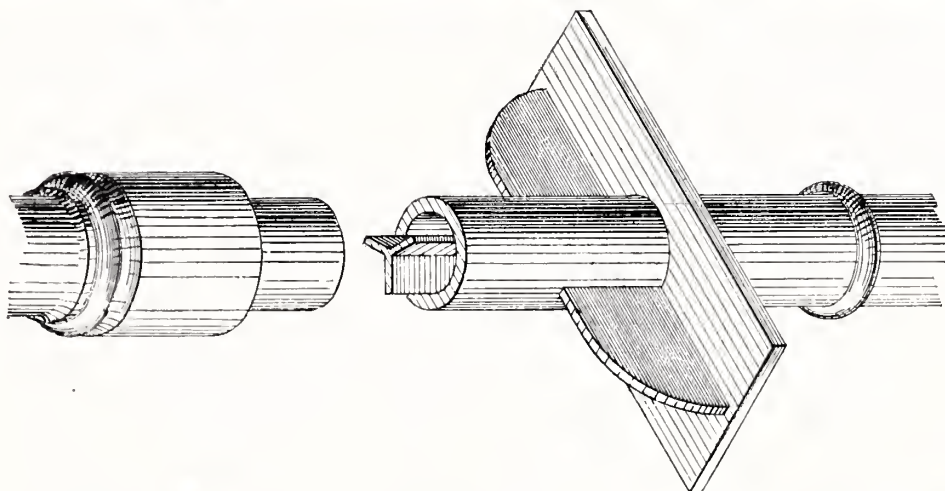
No. 105 A.

Any diameter, 4 inches and larger.  
Any length. Showing connection between two columns, one on top of the other.



No. 104.

Any diameter, 4 inches and larger. Any length.  
Foot Plates two diameters square.



No. 105 B.

Showing another connection between two columns.



No. 106.

Any diameter, 4 inches and larger. Any length.



No. 101.

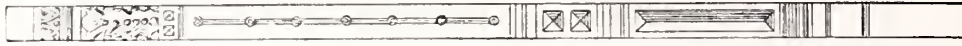
Any diameter, 4 inches and larger. Any length.



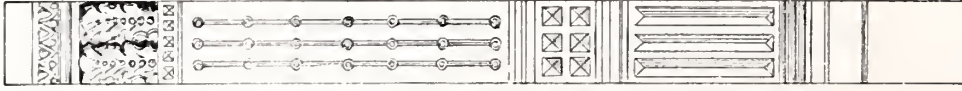
No. 103.

Any diameter, 4 in. and larger. Any length.





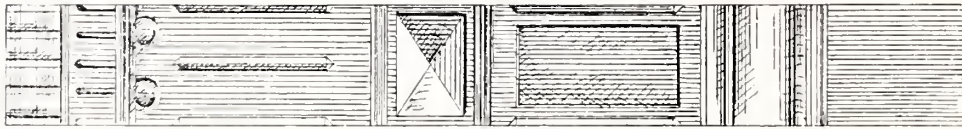
No. 116. 5 inch face.  
6  
Sides any depth. Any length.



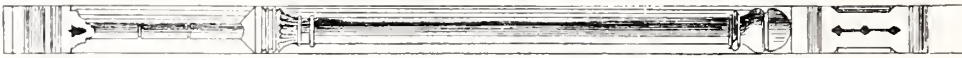
No. 115. 13 inch face.  
18  
Sides any depth. Any length.



No. 114. 8 inch face.  
Sides any depth. Any length.



No. 113. 16 inch face.  
Sides any depth. Any length.



No. 112. 6 inch face.  
7  
Sides any depth. Any length.



No. 111. 21 inch face.  
Sides any depth. Any length.



No. 109. Shaft 10 in. diameter.  
Cap and base 18 in. square.  
Any length.



No. 110. 5 n. diameter.  
6  
7  
8  
10  
12  
Any length.



No. 108. 4 inches diameter only.  
Any length.



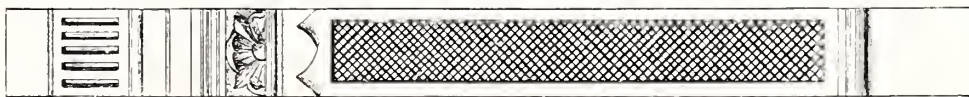
No. 107. 6 in. diameter.  
8  
10  
12  
Any length.



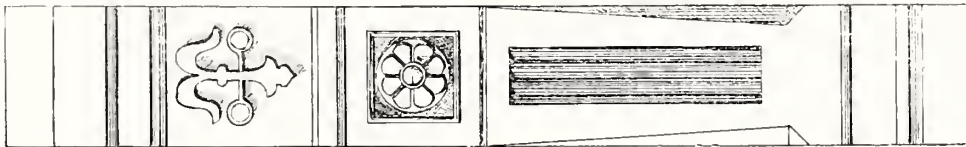
No. 102. 4 in. diameter.  
6  
8  
Any length.



No. 117.  
8 inch face,  
Sides any depth,  
Any length.



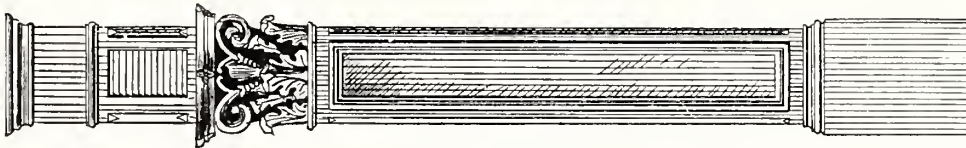
No. 118.  
13 inch face,  
Sides any depth,  
Any length.



No. 119.  
21 inch face,  
Sides any depth,  
Any length.



No. 120.  
9 inch face,  
Sides any depth,  
Any length.



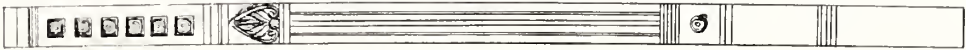
No. 121.  
13 inch face,  
Sides any depth,  
Any length.



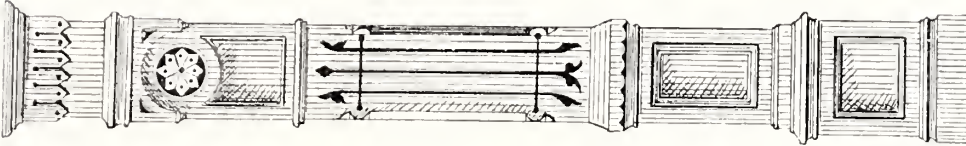
No. 122.  
6 inch face,  
Sides any depth,  
Any length.



No. 123.  
12 and 18 in. face,  
Sides any depth,  
Any length.



No. 124.  
6, 7 and 8 in. face,  
Sides any depth,  
Any length.

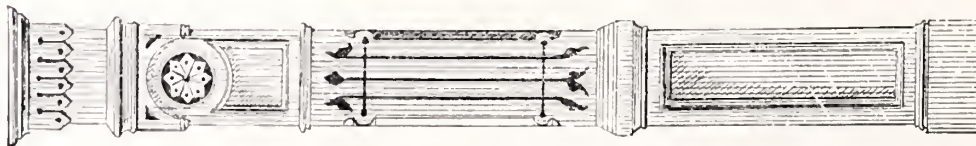


No. 125.  
13 and 18 in. face,  
Sides any depth,  
Any length.



No. 126.  
6 inch face,  
Sides any depth,  
Any length.





No. 127.

13 and 18 inch face.  
Sides any depth.  
Any length.



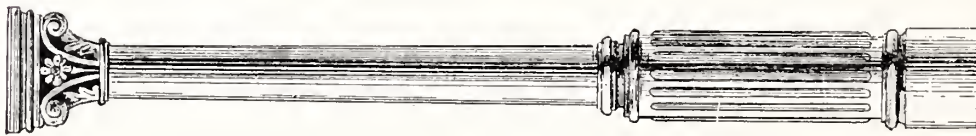
No. 128.

6 inch face.  
Sides any depth.  
Any length.



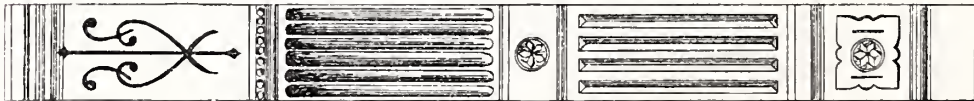
No. 129.

13 inch face.  
Sides any depth.  
Any length.



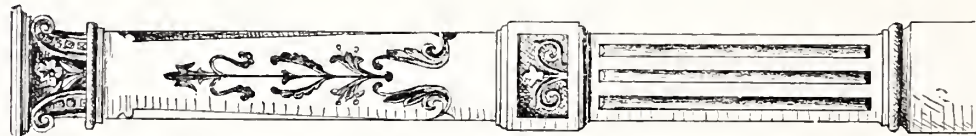
No. 130.

10 inches diameter.  
Any length.



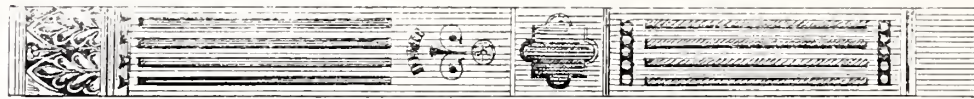
No. 131.

6, 8, 9, 13 and 18 in. face.  
Sides any depth.  
Any length.



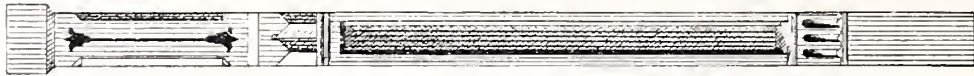
No. 132.

13 inch face.  
Sides any depth.  
Any length.



No. 133.

9 and 13 inch face.  
Sides any depth.  
Any length.



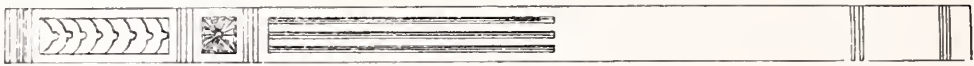
No. 134.

8 inch face.  
Sides any depth.  
Any length.



No. 135.

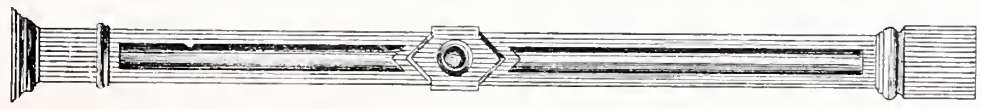
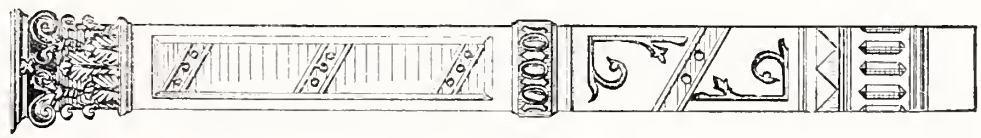
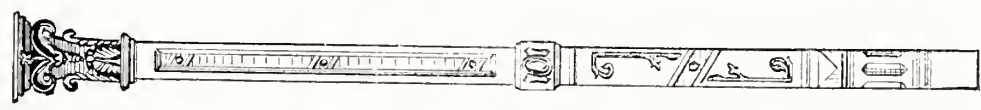

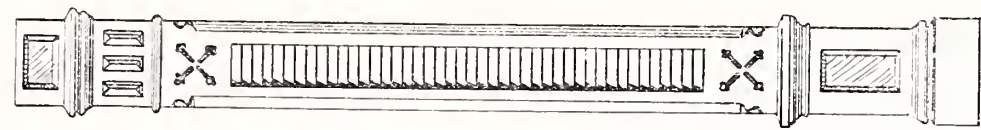


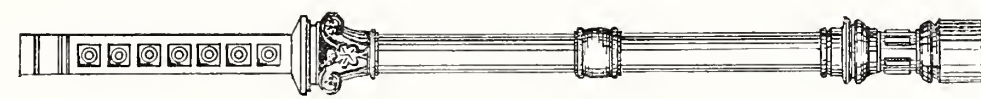
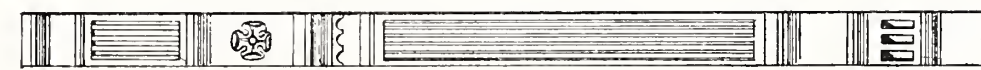



6 and 13 inch face.  
Sides any depth.  
Any length.



No. 136.

8 inch face.  
Sides any depth.  
Any length.



	No. 137.	8 inch face. Sides any depth. Any length.
	No. 140.	13 inch face. Sides any depth. Any length.
	No. 141.	6 inch face. Sides any depth. Any length.
	No. 142.	6 inch face. 9 " 13 " Sides any depth. Any length.
	No. 143.	13 inch face. Sides any depth. Any length.
	No. 144.	5 inches diam. 5 1/2 dowel. Any length.
	No. 145.	6 inch face. 8 " 13 " Sides any depth. Any length.
	No. 146.	5 inches diam. 6 " 7 " Sides any depth. Any length.
	No. 147.	6, 8, 9, 13 and 18 inch face. Sides any depth. Any length.
	No. 148.	6, 8, 9, 13 and 18 inch face. Sides any depth. Any length.
	No. 149.	8 inch face. Sides any depth. Any length.
	No. 150.	8 inches diam. Any length.



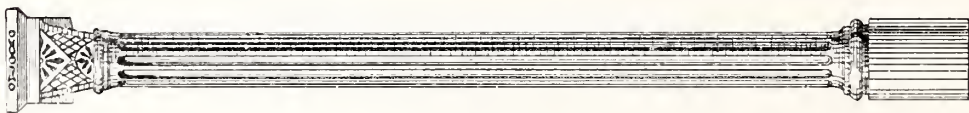
No. 151.  
16 inch face.  
Sides any depth.  
Any length.



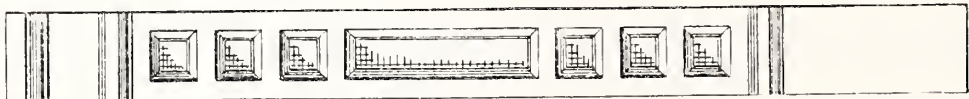
No. 152.  
20 inch face.  
Sides any depth.  
Any length.



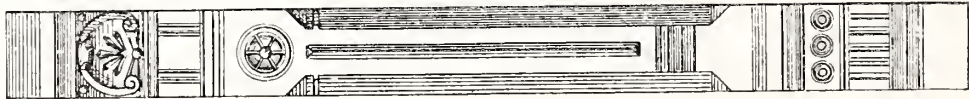
No. 153.  
12 inches diam.  
Any length.



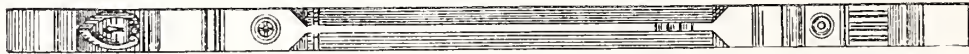
No. 154.  
6, 7 and 8 inches diam.  
Any length.



No. 155.  
6 and 13 inch face.  
Sides any depth.  
Any length.



No. 156.  
13 inch face.  
Sides any depth.  
Any length.



No. 157.  
6 inch face.  
Sides any depth.  
Any length.



No. 158.  
8 inch face.  
Sides any depth.  
Any length.



No. 159.  
18 inch face.  
Sides any depth.  
Any length.



No. 160.  
13 inch face.  
Sides any depth.  
Any length.



No. 161.  
6 and 8 in. diam.  
Any length.



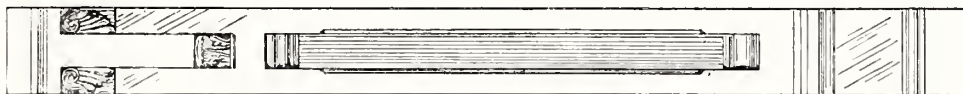
No. 162.

8 inch face.  
Sides any depth.  
Any length.



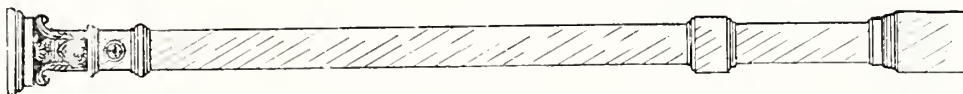
No. 163.

6 inch face.  
Sides any depth.  
Any length.



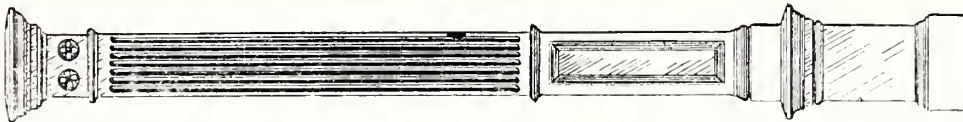
No. 164.

13 inch face.  
Sides any depth.  
Any length.



No. 165.

6, 8, 9 and 13 inch face.  
Sides any depth.  
Any length.



No. 166.

9 inch face.  
Sides any depth.  
Any length.



No. 167.

8 inch face.  
Sides any depth.  
Any length.



No. 168.

12 inch face.  
Sides any depth.  
Any length.



No. 169.

6 inch face.  
Sides any depth.  
Any length.



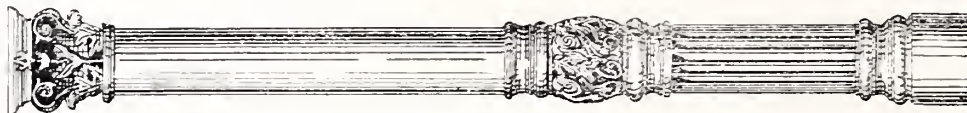
No. 170.

13 inch face.  
Sides any depth.  
Any length.





No. 179.

6 and 8 inch diameter.  
Any length.

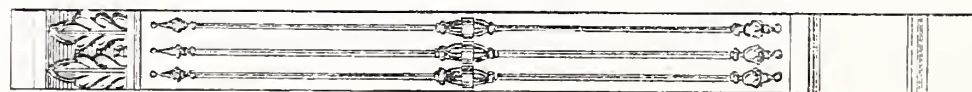
No. 178.

10 inch diameter.  
Any length.

No. 177.

5 and 6 inch diameter.  
Any depth.  
Any length.

No. 176.

5 inch face.  
6 " "  
Sides any depth.  
Any length.

No. 175.

9 inch face.  
13 " "  
Sides any depth.  
Any length.

No. 174.

5 inch face.  
6 " "  
Sides any depth.  
Any length.

No. 173.

13 inch face.  
Sides any depth.  
Any length.

No. 172.

6 and 8 inch diam.  
Any length.

No. 171.

6 and 8 inch diam.  
Any length.

## AWNING FRAMES.

For Canvas, Sheet Iron or Corrugated Iron Covers.



### AWNING FRAME No. 1.

25 feet front, 12 feet projection.

Three Columns, 4 inch diameter by 11 feet (stand about 12 feet apart).

Four Corner Brackets, No. 1, 15x21 inches.

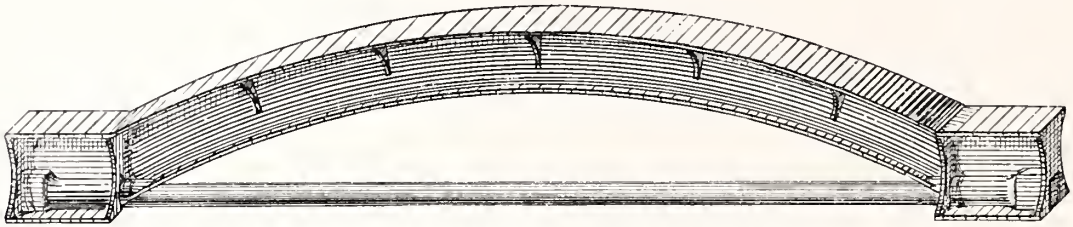
Twenty-five feet Lattice Facia, 12 inches high.

Five Rafters, 2x2 inch, T iron.

Made any size to suit.

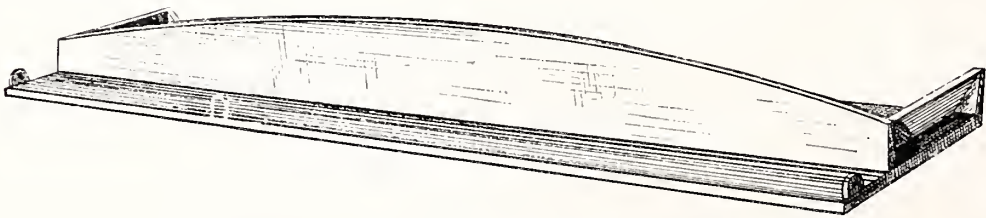


## TENSION ROD GIRDERS.



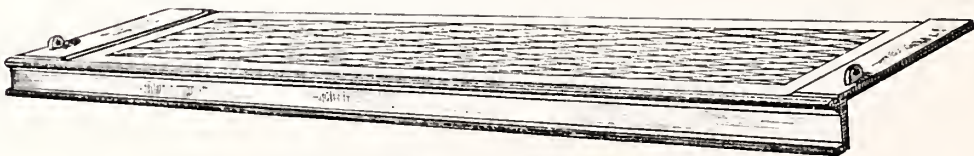
Made 9, 13 and 18 inches wide. Any length.

## LINTEL PLATES.



Made any Size. With or without Skewbacks.

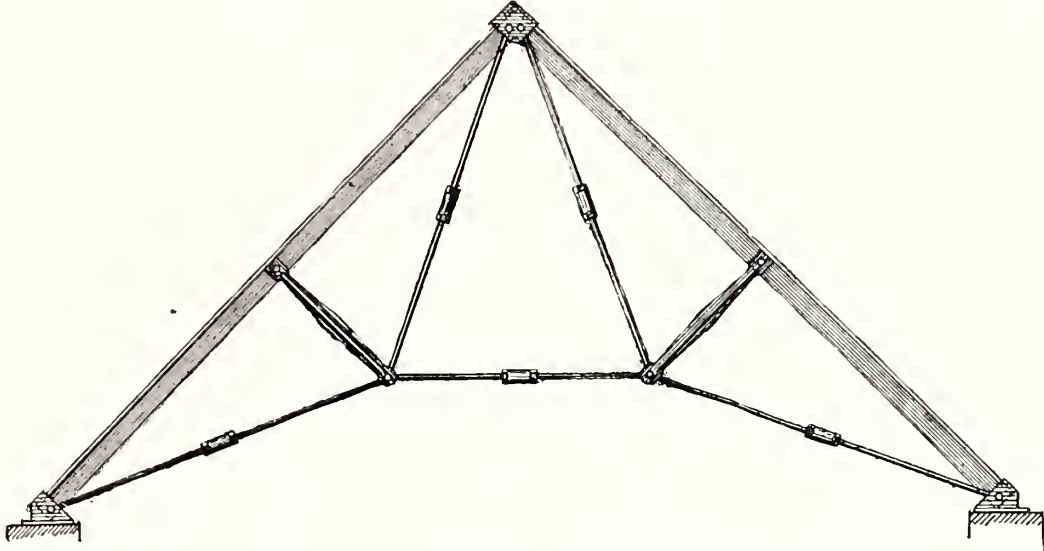
## DOOR SILLS.



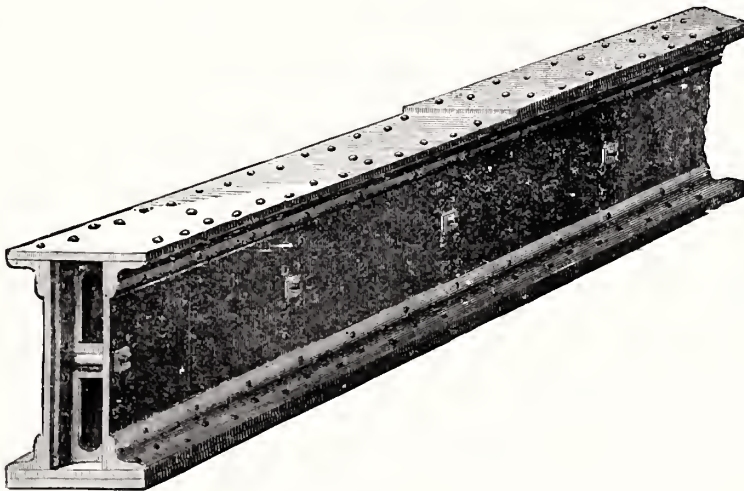
Made any Size. With or without Risers.

## WROUGHT IRON GIRDERS AND BEAMS.

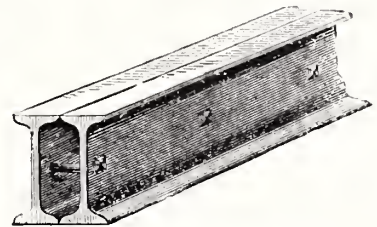
Tables of Strength, Page 96.



WROUGHT IRON ROOF TRUSSES. ANY SPAN.

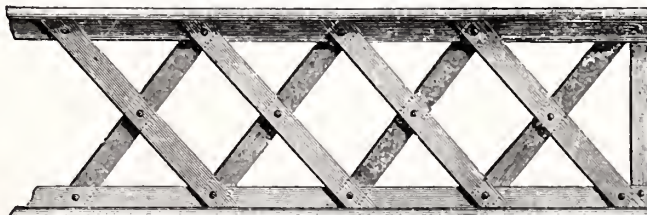


No. 1.  
WROUGHT IRON BOX GIRDER.  
Any Size.

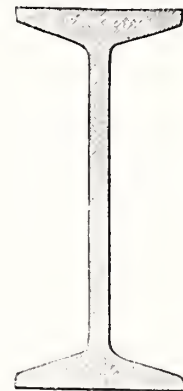


No. 3.  
COMPOUND GIRDERS  
OF BEAMS.

Any Size—See page 96.



No. 2.  
WROUGHT IRON LATTICE GIRDERS.  
Any Size.



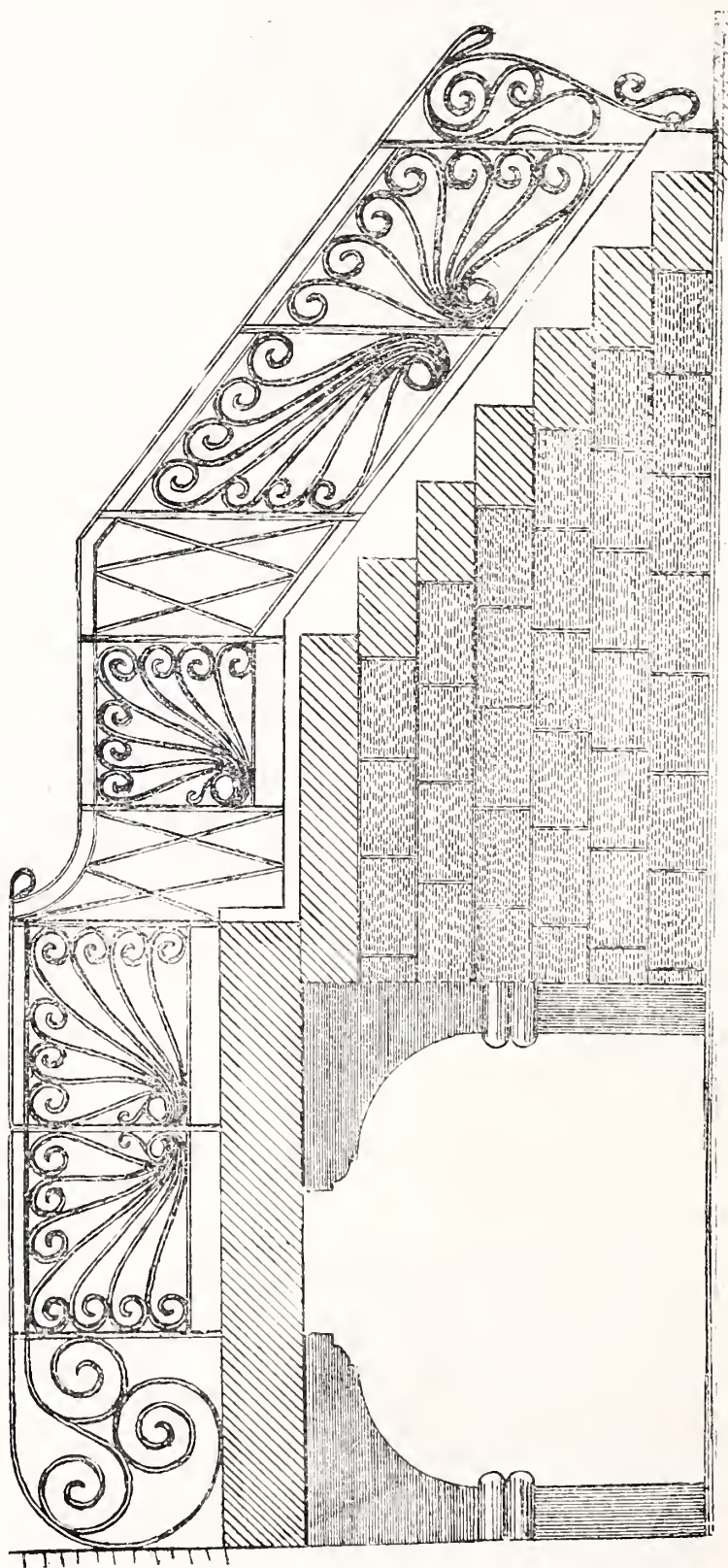
No. 4.  
WROUGHT IRON BEAMS.  
Any Size—See page 96.



## IRON STAIRS AND STAIR RAILINGS.

The illustrations on the following pages represent Straight and Circular Stair-ways, for interior and exterior purposes, which, for ornamental appearance, durability and safety in case of fire, are much in favor.

Parties ordering will please state the exact Style and Size wanted. Estimates promptly furnished on application.



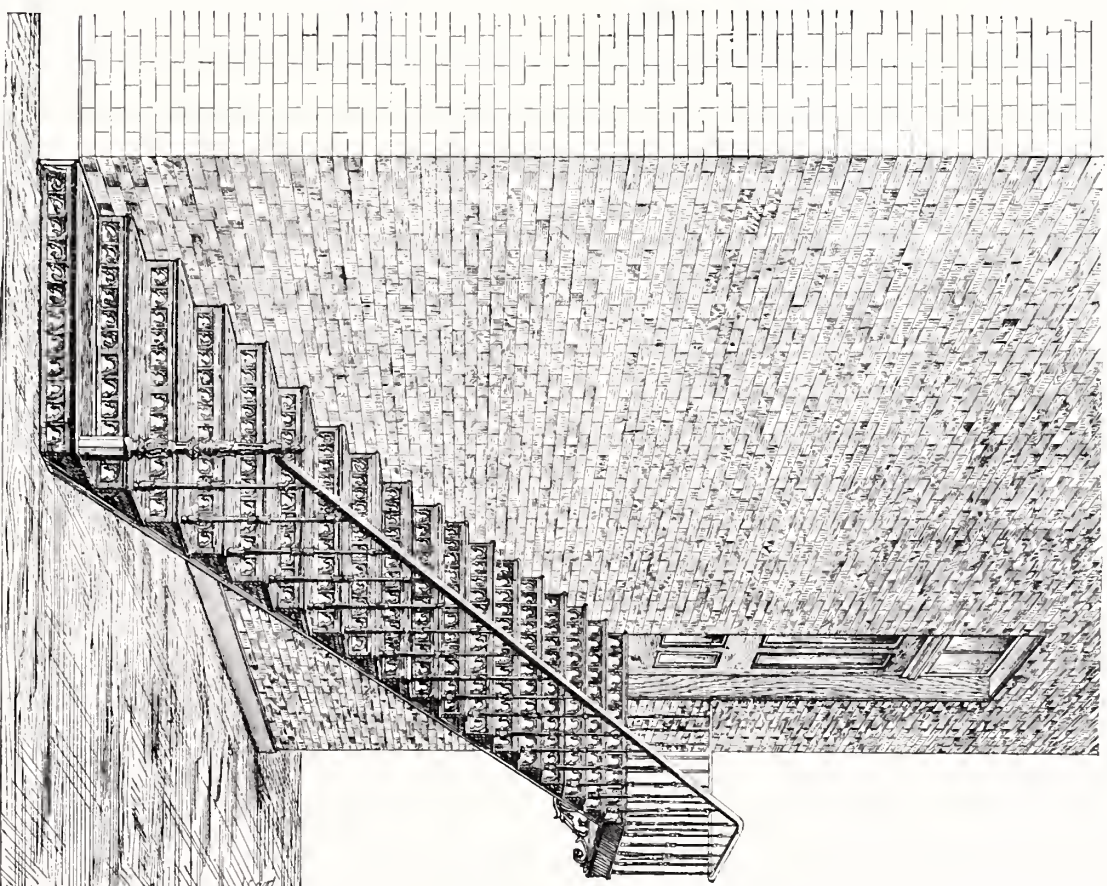
WROUGHT RAILING No. 80.

2 feet, 9 inches high.



## STAIRS No. 3.

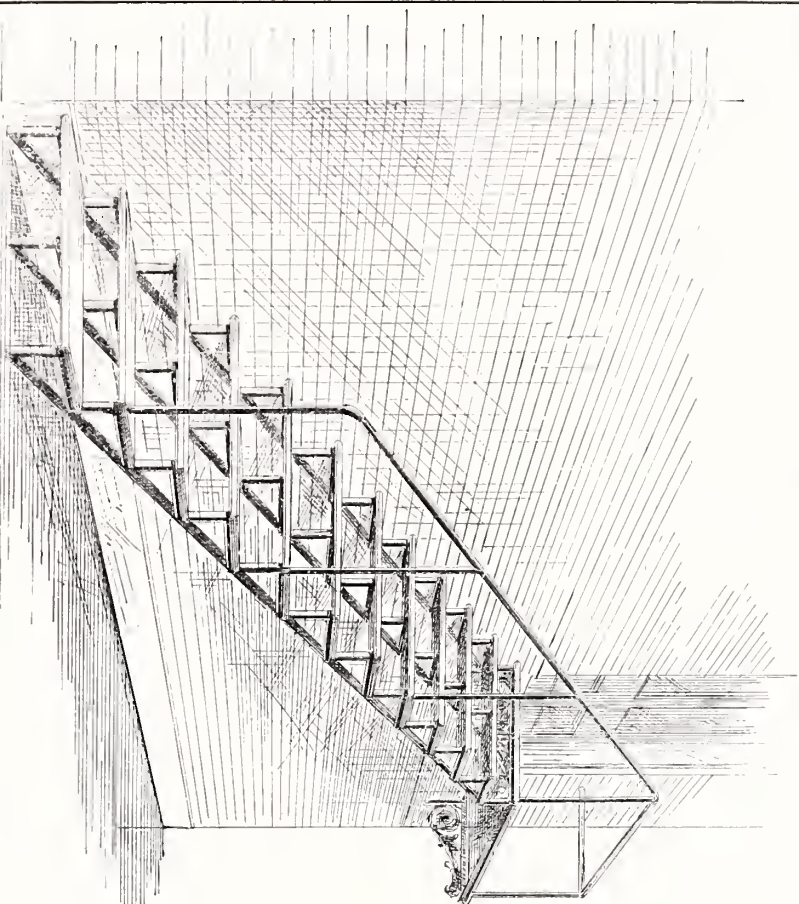
Can be made any Size.



Consists of 3 Carriages, Treads, Platform, Risers, Balusters, Hand Rail and Newel.  
12 feet high, 18 feet run, 3 feet wide. Platform 3x4 feet.

## STAIRS No. 2.

Can be made any Size.



Consists of

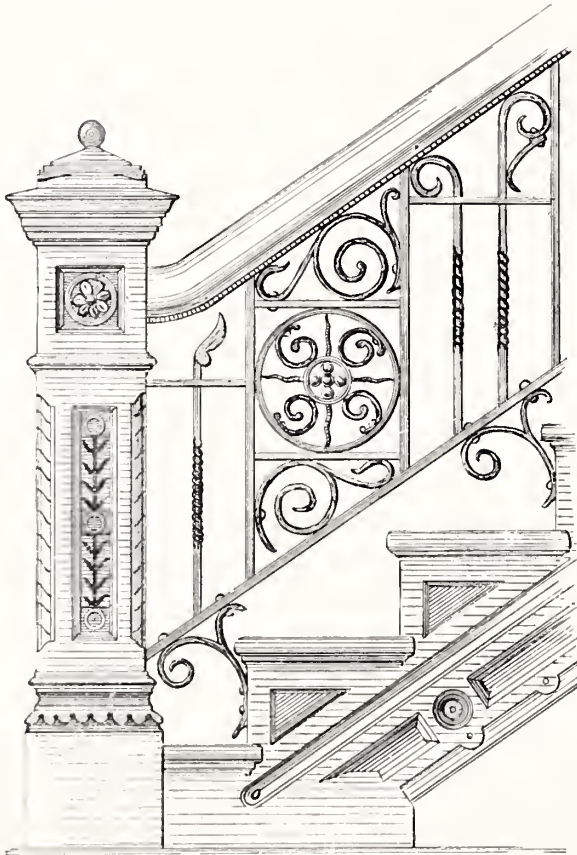
3 Carriages, Hand Rail and Brackets.

12 ft. high, 18 ft. run, 3 ft. wide. Platform 3x4 feet.



## STAIRS No. 10.

For Indoors.

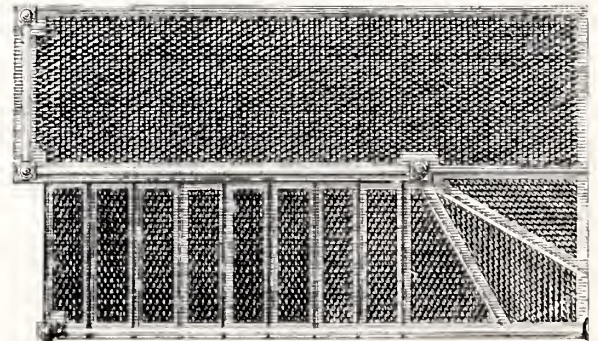
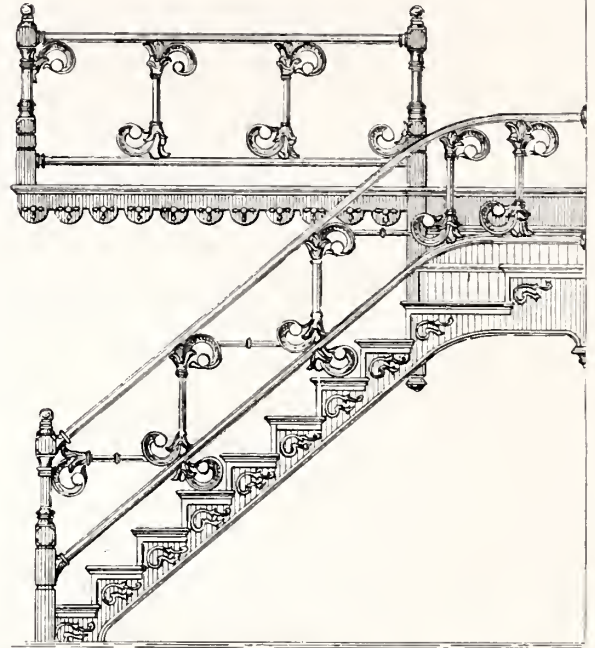


Consists of

Newel Post, No. 28, 4 feet 9 inches high.  
 Wrought Iron Railing No. 82, prepared for Wood  
 Hand Rail.  
 Cast Iron Carriages, Treads and Risers.  
 Can be made any size.

## STAIRS No. 11.

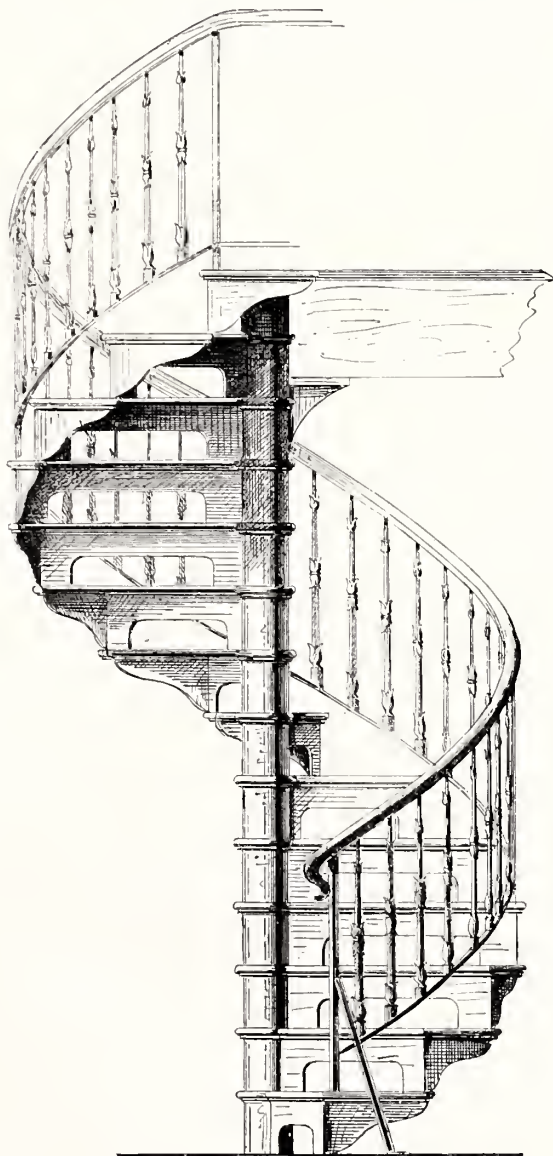
For front of second story Bank Vault.



Consists of

Supporting Brackets No. 1.  
 Cast Iron Posts No. 18, 3 feet 3 inches high.  
 Wrought and Cast Railing No. 81, 2 ft. 9 inches high.  
 Cast Carriages, Treads, Risers and Platform.  
 Can be made any size and shape.

# IRON STAIRS.

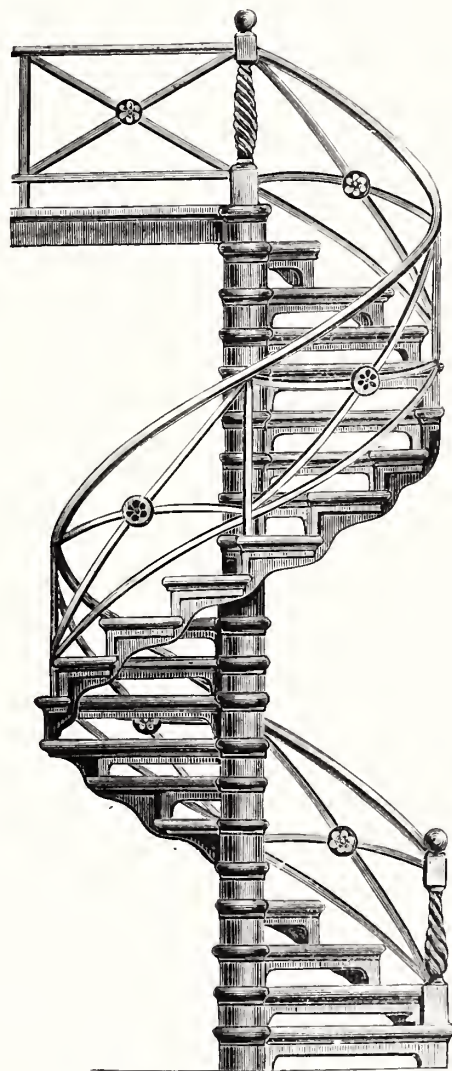


STAIRS No. 4.

6 feet Diameter. Can be made any Height or Diameter.

Consists of

Iron Column and Treads with Risers.  
Railing No. 27, 2 feet 6 inches high.



STAIRS No. 5.

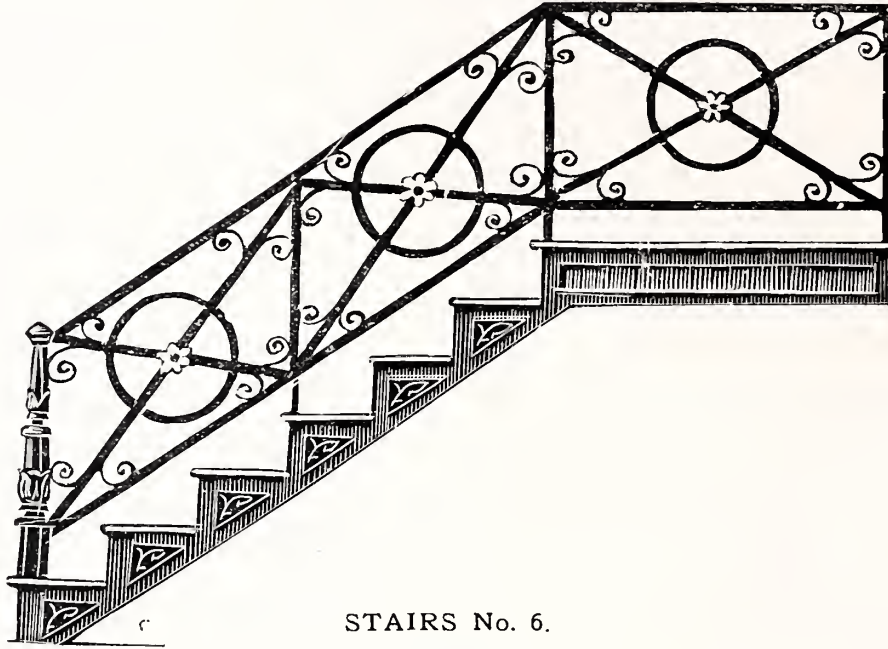
5 ft. 6 in. Diam. Can be made any size.

Consists of

Railing No. 40, 2 feet 9 inches high.  
Post No. 4, 3 feet 8 inches high.  
Iron Column and Treads with Risers.



## IRON STAIRS.



STAIRS No. 6.

Any Size.

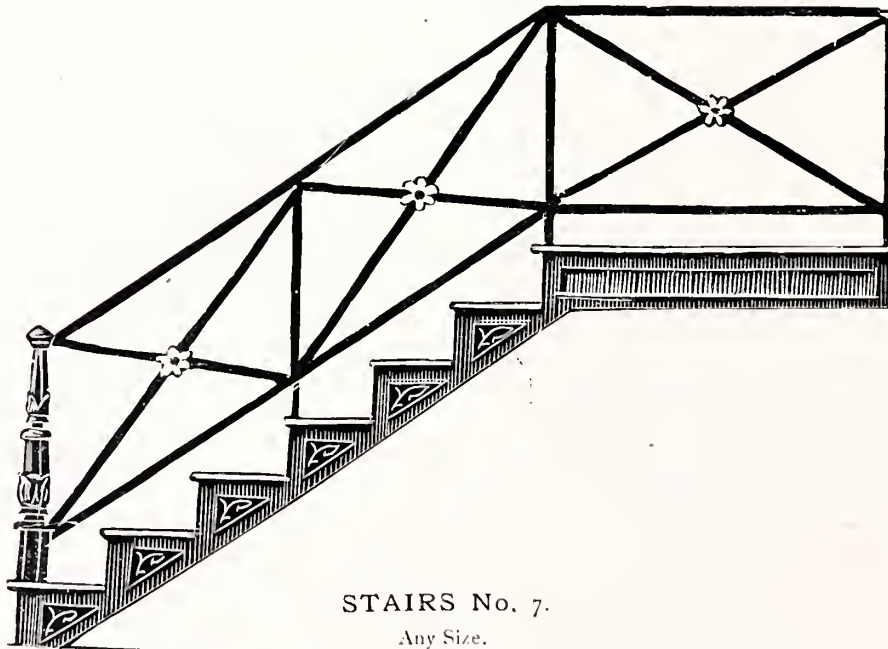
Consists of

3 Carriages.

Railing No. 25, 2 feet 8 inches high.

Post No. 2, 2 feet 8 inches high.

Either Iron or Wood Treads, Platform and Risers.



STAIRS No. 7.

Any Size.

Consists of

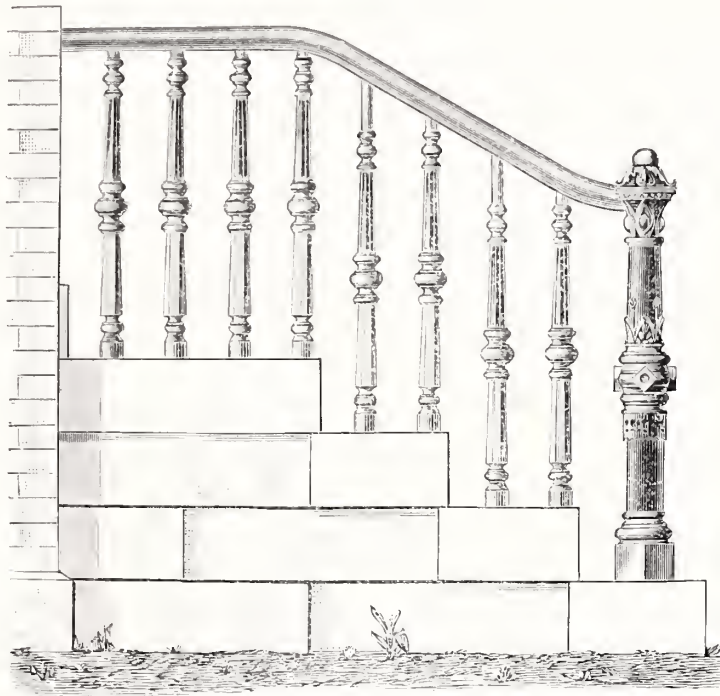
3 Carriages.

Railing No. 37, 2 feet 8 inches high.

Post No. 2, 2 feet 8 inches high.

Either Iron or Wood Treads, Platform and Risers.

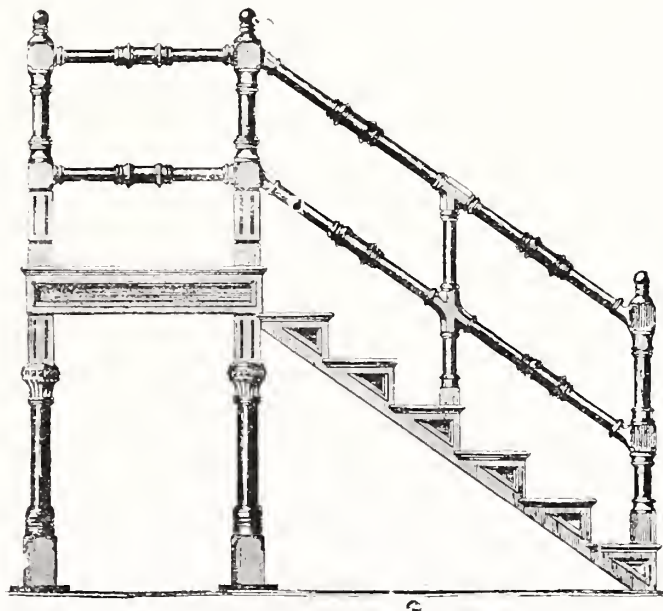
# IRON STAIRS.



STAIRS No. 8.

Consists of

Balusters, No. 66. Newel Post, No. 6, 3 feet 8 inches high. Hand Rail.



STAIRS No. 9.

Any Size. Consists of

Cast Iron Treads, Risers and Platform. Two Columns, 3 inches diameter.

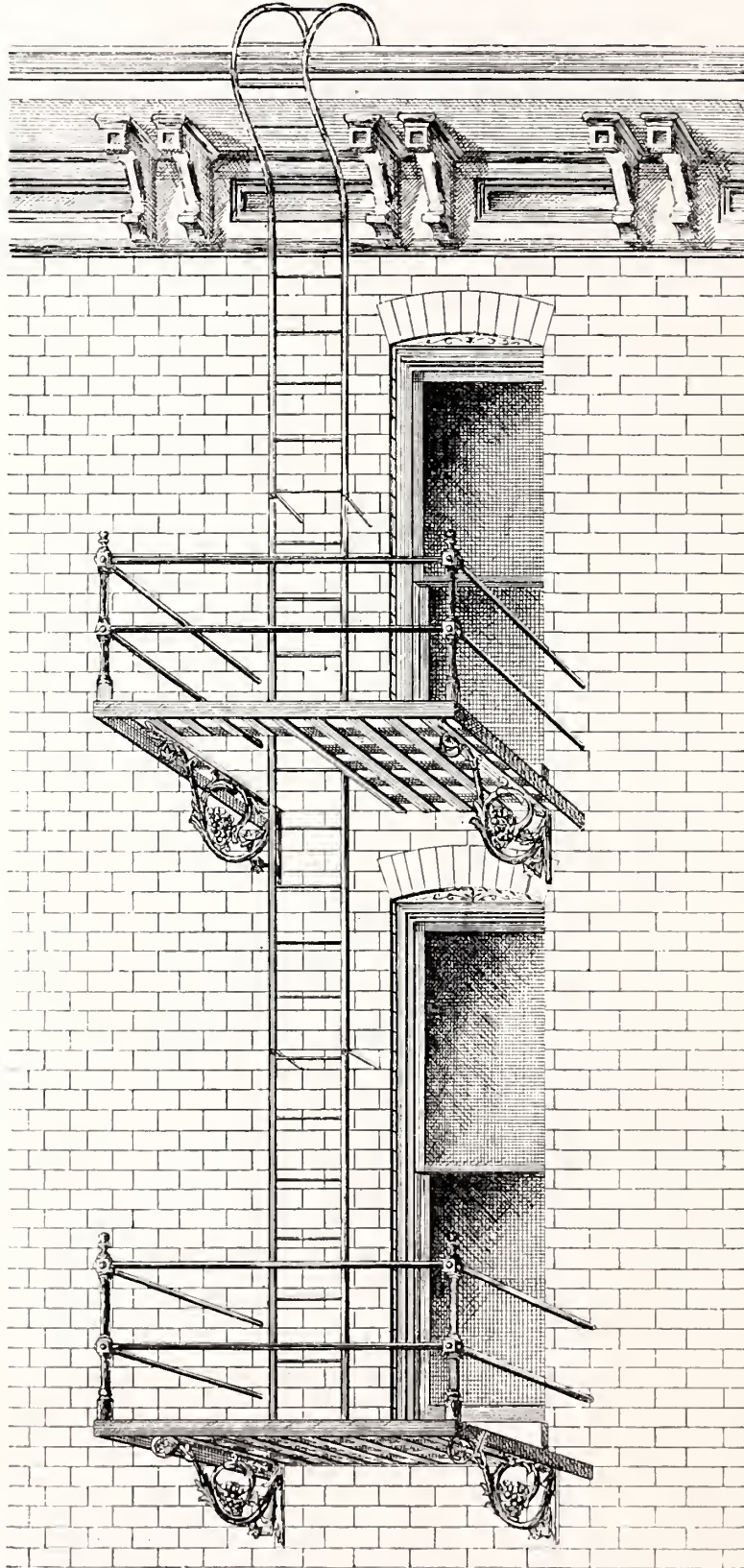
Three Carriages. Two Posts, No. 18. One Post, No. 19.

Two Gas Pipe Rails, with Collars.

One Intermediate Post, No. 24.

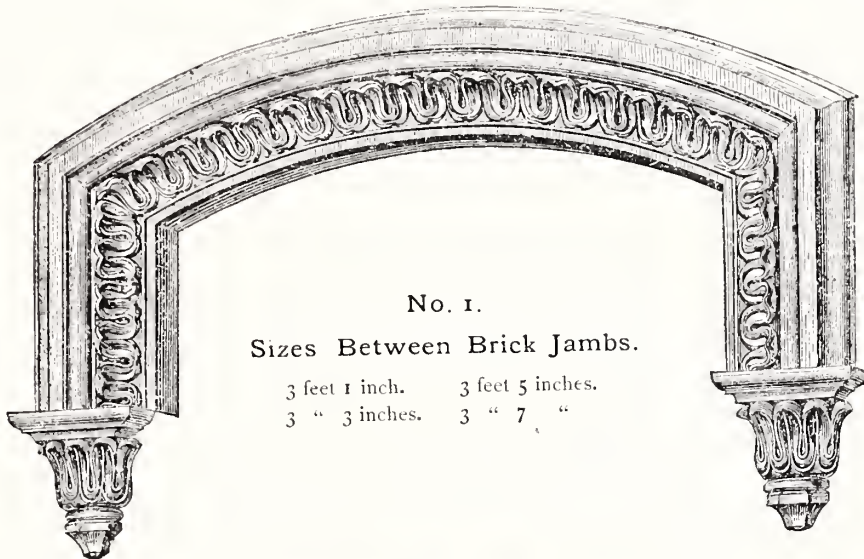


## FIRE ESCAPES OF ALL KINDS.



Made in Sizes and Shapes to suit premises.

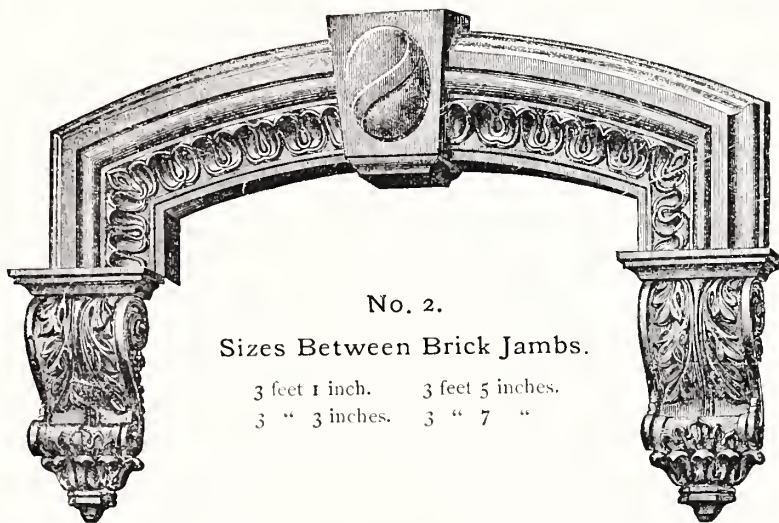
# WINDOW CAPS.



No. 1.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 2.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



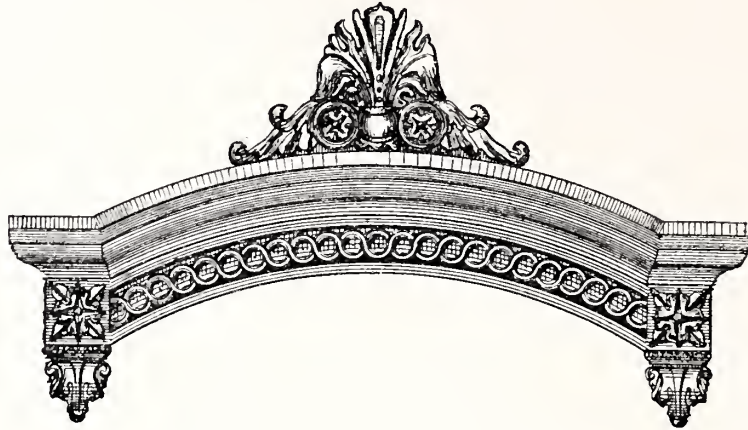
No. 5.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



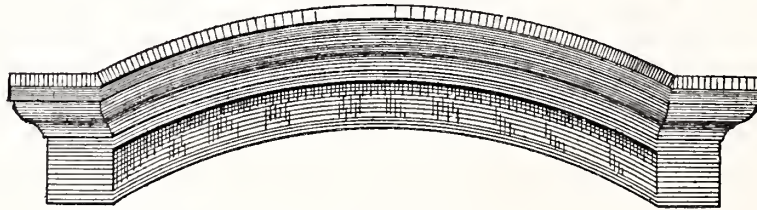
## WINDOW CAPS.



No. 8.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 9.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 6.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 7.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "

# WINDOW SILLS.



No. 1.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 2.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 3.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 5.

Sizes Between Brick Jambs.

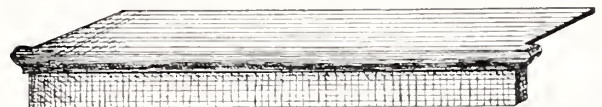
3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



No. 7.

Sizes Between Brick Jambs.

3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



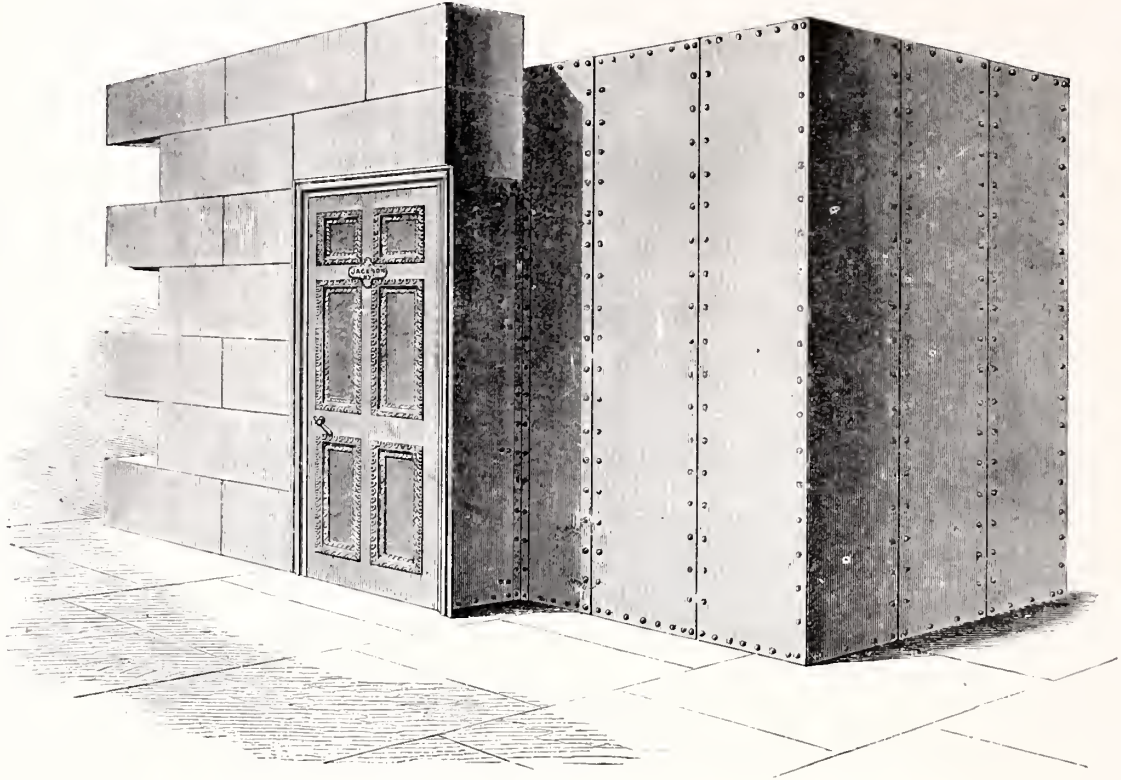
No. 6.

Sizes Between Brick Jambs.

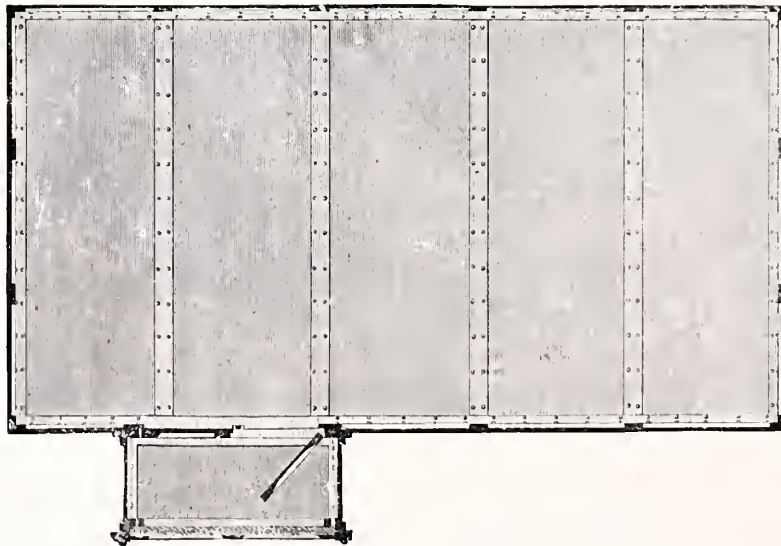
3 feet 1 inch.	3 feet 5 inches.
3 " 3 inches.	3 " 7 "



# IRON VAULT LINING AND ENTRANCE DOOR.



[Elevation.]



[Ground Plan.]

Can be made any Style, Size and Shape.

**IRON JAIL AND PRISON WORK OF EVERY DESCRIPTION A SPECIALTY.**

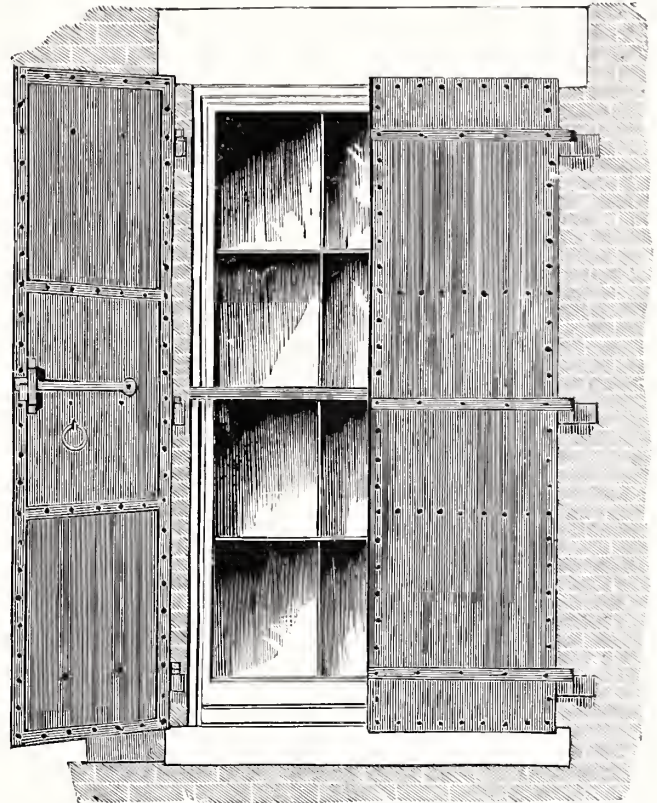
Estimates furnished promptly on application.

# IRON VAULT ENTRANCES.

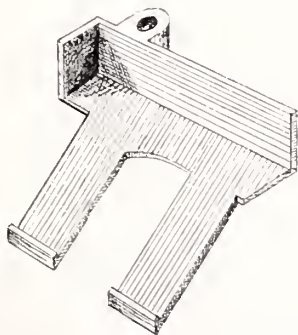


Door 2 ft. 6 in. by 6 ft. 6 in. Jambs 20 in.  
Can be made any Size.

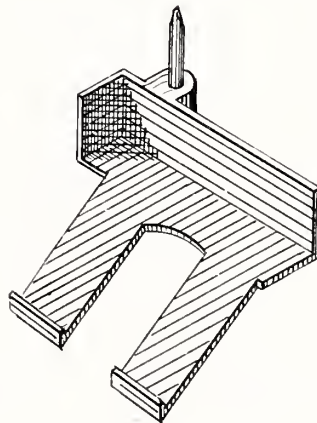
# IRON SHUTTERS AND DOORS.



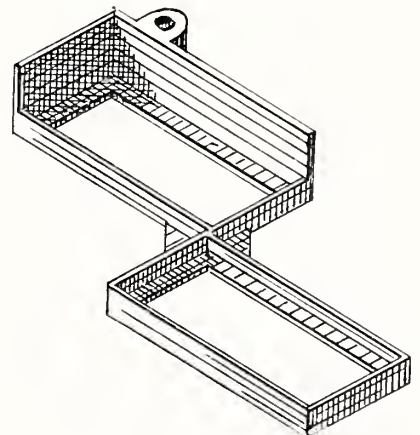
Every Description and Size.



No. 2.



No. 3.



No. 1.

Shutter Hinge Eyes, for Building in Brick Walls.





No. 1.



No. 2.

**Corner Guards.**

4x4 inches.

3½x3½ in.

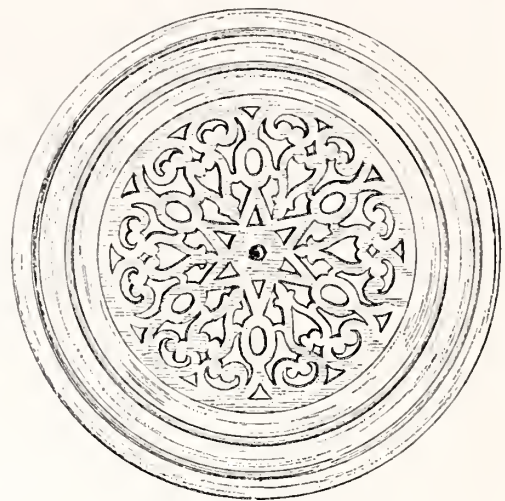
4 feet high.

3 ft. 6 in. high.

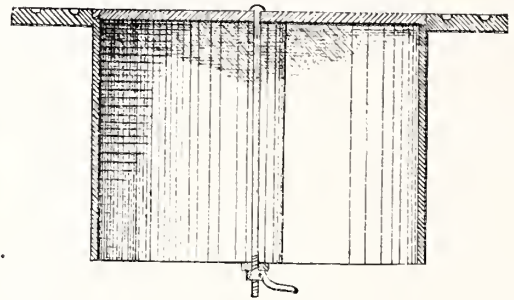
Made any Size to order.

**Down Spout Guards.**3, 4 and 5 inch inside  
diameter.

4, 5 and 6 feet long.

**Coal Vault Covers.**

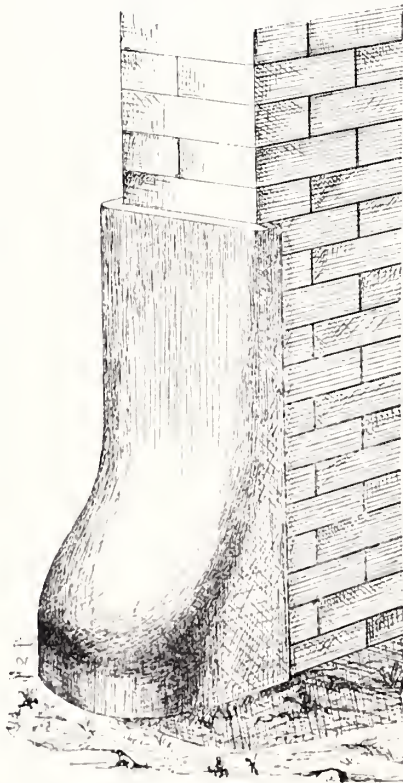
Perforated, Solid and Illuminated.

**Coal Vault Rings.**

No. 1, 18 in. diameter by 13 in. deep.

No. 2, 24 in. diameter by 18 in. deep.

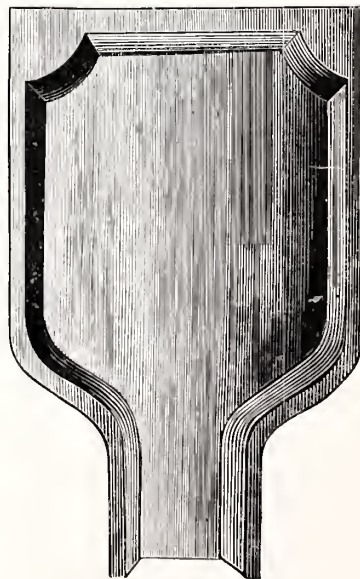
Can be changed to any Depth.



No. 3.

**Wagon Wheel Guard.**

3 ft. high. For 9, 13 and 18 in. walls.



No. 1.

**Drip Pan.**

13 inches by 21 inches.

**Drain Grates**

Of all kinds in Stock, and

Made to Order.



No. 1.

15, 18 and 24 inches long. Any size made to order.



No. 2.

15, 18 and 24 inches long.  
Any size made to order.

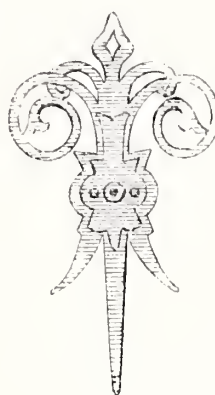
7, 8, 9, 11 and 14  
inches diam.



No. 3.

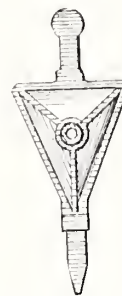
18, 24 and 30 inches long.  
Any size made to order.

$5\frac{1}{2} \times 10$ ,  $7 \times 12$ ,  
 $8 \times 12$ ,  $9 \times 12$ ,  
 $9\frac{1}{2} \times 17$ ,  $15 \times 24$ .



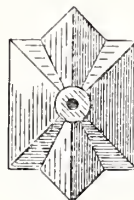
No. 4.

3 feet 4 inches long by 1 foot  
11 inches wide.



No. 8.

$36 \times 11$ .



No. 6.  
 $12 \times 8$ .



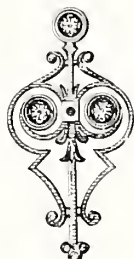
No. 14.  
 $10 \times 9\frac{1}{2}$ .



No. 13.  
10 in. diam



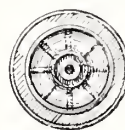
No. 7.  
 $24 \times 14$ .



No. 5.  
 $32 \times 16$ .



No. 9.  
 $14\frac{1}{2} \times 8\frac{1}{2}$ .



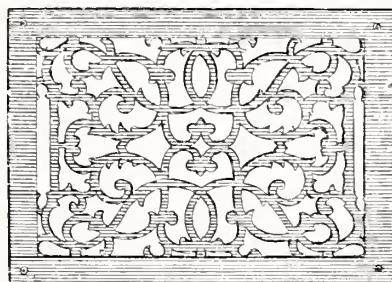
No. 10.  
16 in. diam.



No. 11.  
16 in. diam.

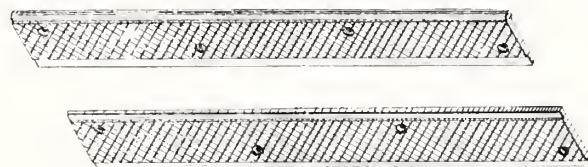


No. 12.  
12 in. diam.



Ventilators.

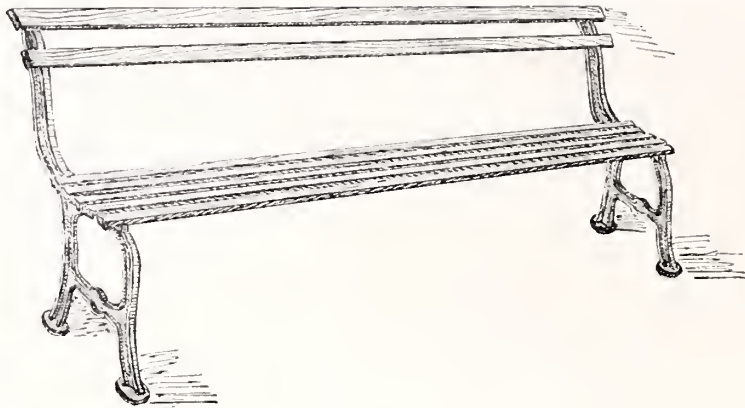
No. 1, 5 in. by $8\frac{3}{4}$ in.	No. 7, 5 in. by 18 in.
No. 2, $5\frac{1}{4}$ in. by $10\frac{7}{8}$ in.	No. 8, $7\frac{1}{2}$ in. by $7\frac{1}{2}$ in.
No. 3, $7\frac{1}{4}$ in. by $22\frac{1}{2}$ in.	No. 9, $7\frac{1}{2}$ in. by 15 in.
No. 4, $9\frac{3}{4}$ in. by $19\frac{1}{4}$ in.	No. 10, 7 in. by 9 in.
No. 5, $9\frac{1}{2}$ in. by $13\frac{1}{4}$ in.	No. 11, 12 in. by 24 in.
No. 6, 5 in. by $14\frac{1}{2}$ in.	No. 12, 9 in. by 24 in.
No. 13, 9 in. by 12 inches.	



Step Plates.

Heel, 2 inches wide, any length.  
Nosing,  $2\frac{1}{2}$  inches wide, any length.





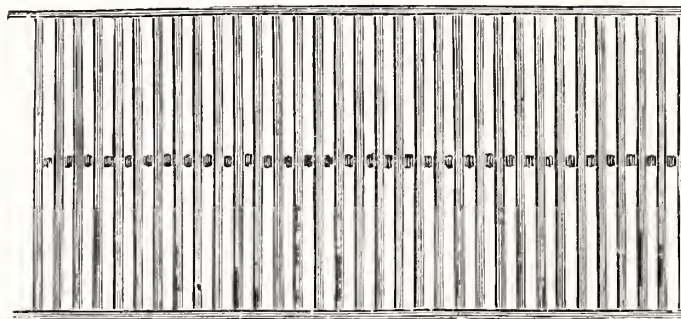
No. 1.

**Park Settee.**

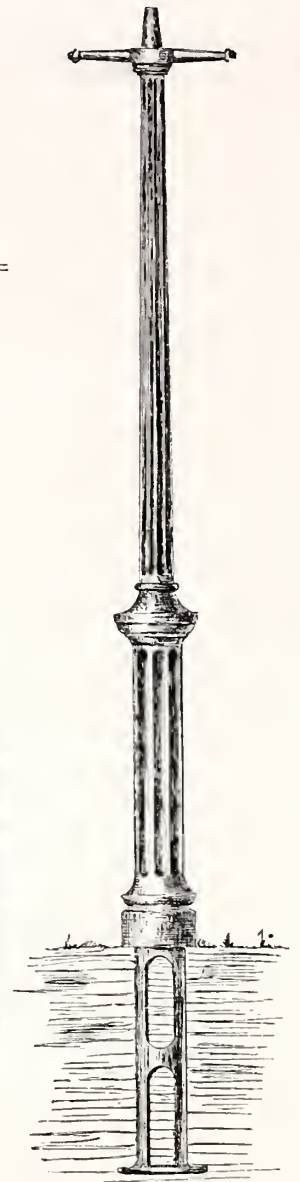
6 feet long, 2 legs. 8 feet long, 3 legs. 10 feet long, 3 legs.

**Tree Boxes.**

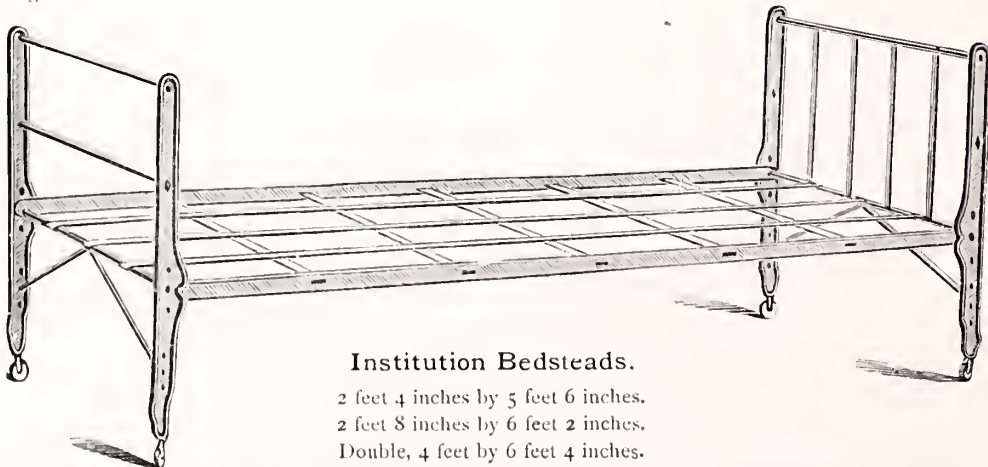
13 in. diameter at center.  
5 feet high.

**Wrought Area Grates.**

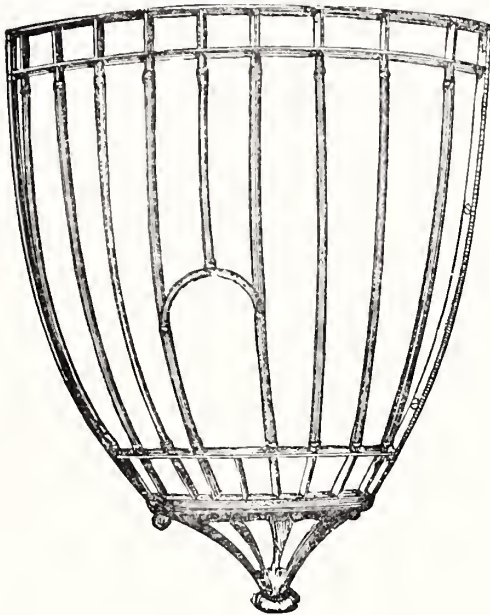
Made any size.

**Street Lamp Posts.**

Can be used for gas, gasoline  
or coal oil lamps.

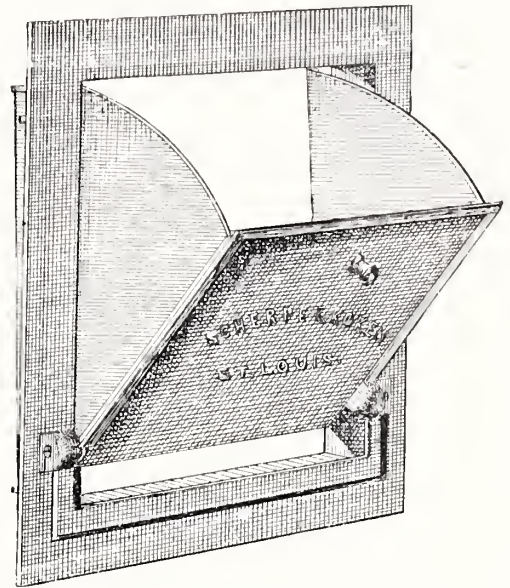
**Institution Bedsteads.**

2 feet 4 inches by 5 feet 6 inches.  
2 feet 8 inches by 6 feet 2 inches.  
Double, 4 feet by 6 feet 4 inches.



Corner Hay Rack.

3 ft. 2 in. high. 2 ft. 2 in. projection.



Ash Chute Doors.

15 inches by 15 inches.



Flue Rings.

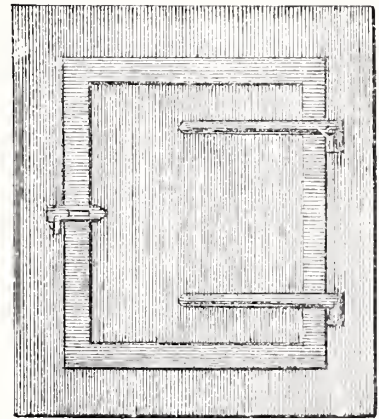
6, 7 and 8 inches diameter.



Foot Rail Brackets.



Hand Rail Brackets.

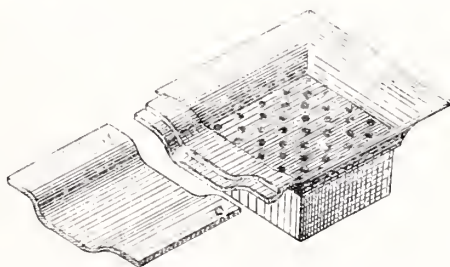


Ash Flue Doors.

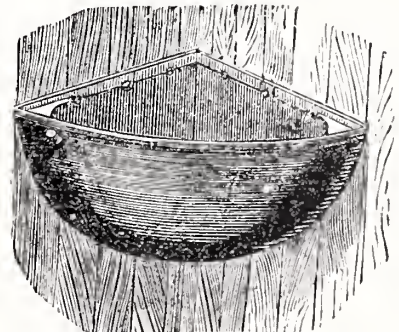
10 inches by 12 inches.

12 inches by 12 inches.

16 inches by 16 inches.



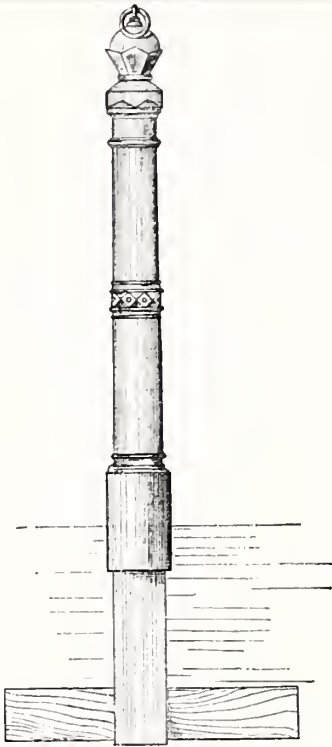
Stable Bell Trap and Gutter.



Corner Oat Troughs.

18 in. by 18 in. by 12 in. deep.

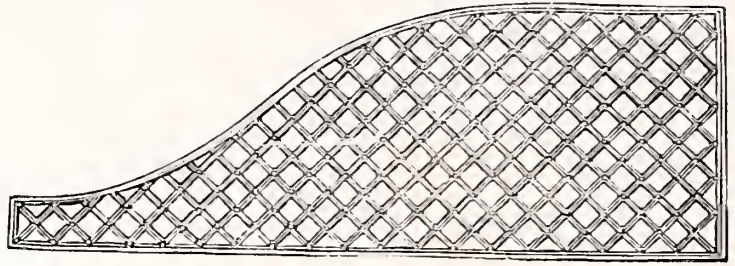




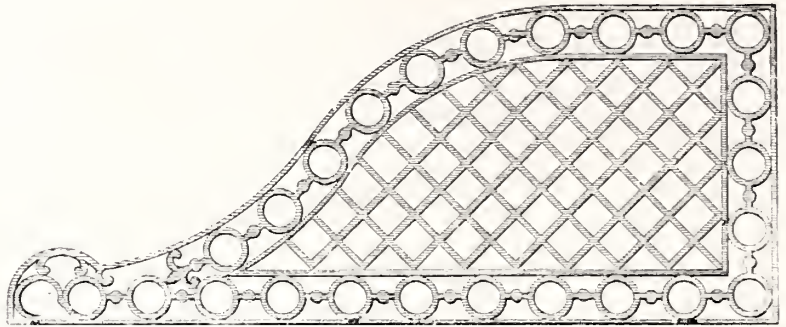
**No. 1. Hitch Post.**  
3 feet 6 inches high,  
18 inches in ground.



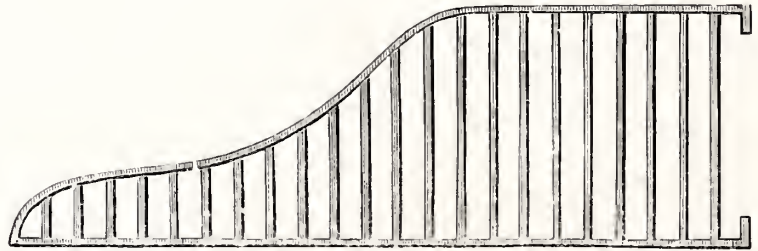
**No. 2. Hitch Post.**  
3 feet 6 inches high,  
18 inches in ground.



**No. 1.**  
**Cast Iron Stall Guard.**  
8 feet by 2 feet 6 inches.



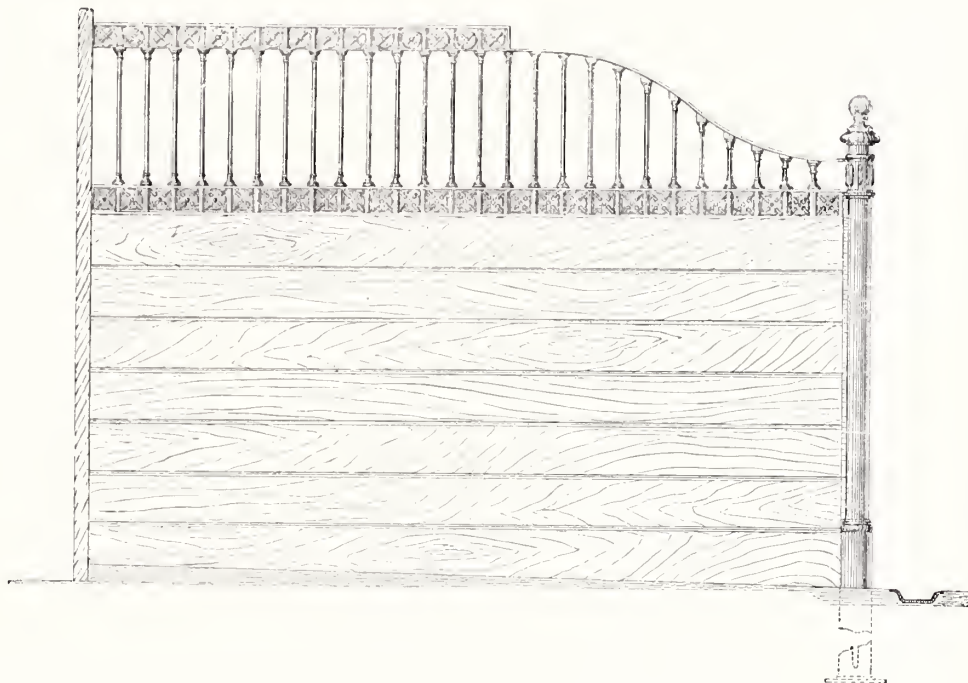
**No. 3.**  
**Cast Iron Stall Guard.**  
5 feet 6 inches by 2 feet 4 inches.



**No. 2.**  
**Wrought Iron Stall Guard.**  
2 feet 6 inches by 7 feet. Made any size.



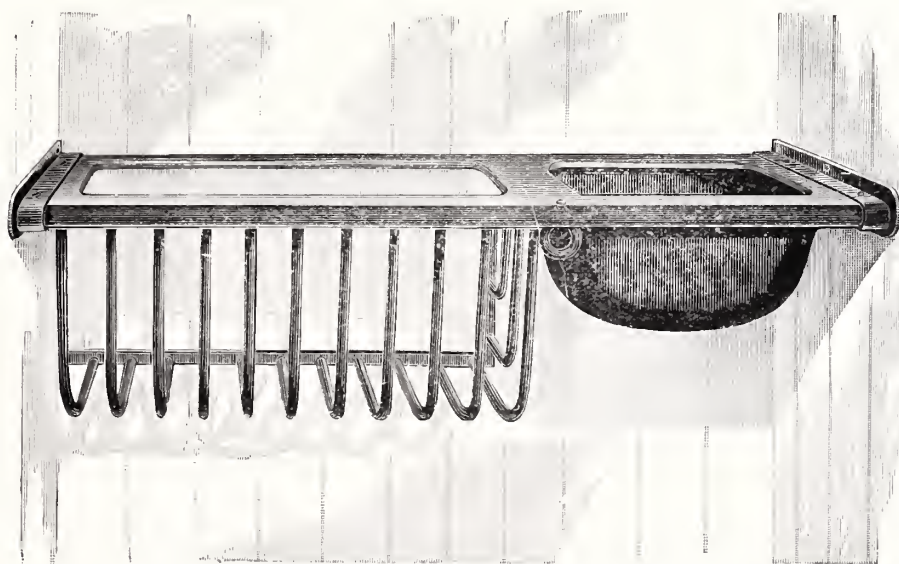
**No. 5.**  
**Wrought Iron Stall Guards.**  
2 feet 6 inches by 7 feet. Made any size.



**Wrought and Cast Iron Stall Guard, No. 4.**

2 feet 2 inches by 8 feet 4 inches.

Stall post No. 1.  $3\frac{1}{2}$  inches diameter by 6 feet 6 inches high.

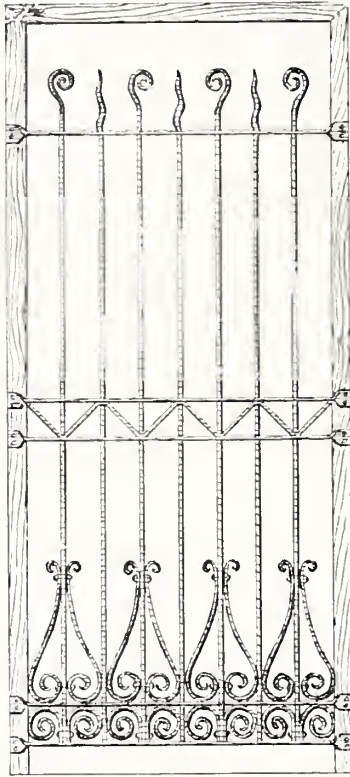


**Cast Iron Manger and Wrought Iron Hay Rack.**

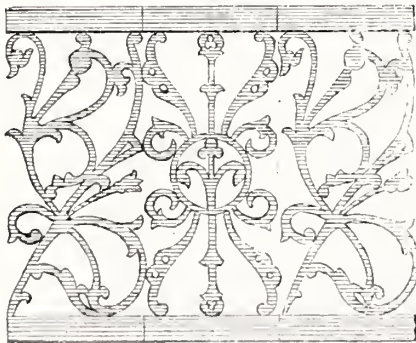
1 foot 8 inches wide. Adjustable to any length from 4 feet 6 inches to 4 feet 10 inches.



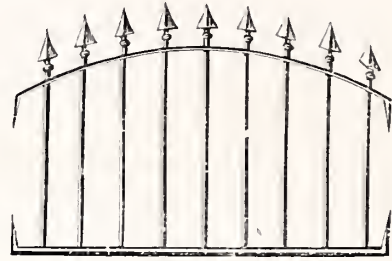
## WINDOW GUARDS AND GRILLES.



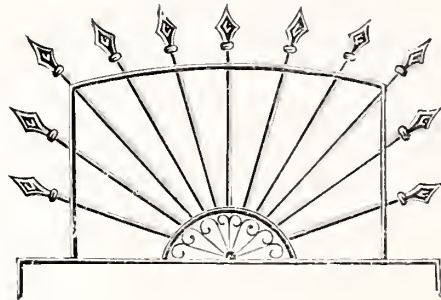
No. 21.  
Wrought Iron Guard.  
Made any size.



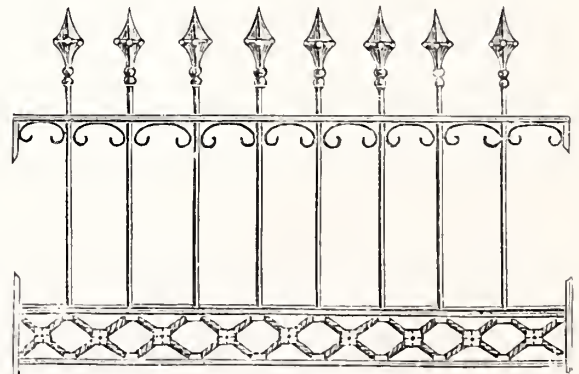
No. 9.  
Cast Grille.  
18 inches high. Any length.



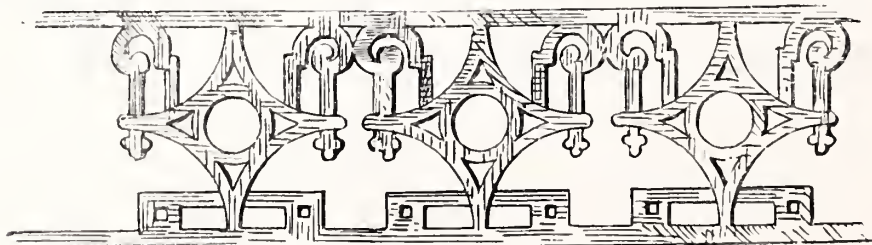
No. 4.  
2 feet high. 3 feet wide. Any size.



No. 5.  
Wrought and Cast Window Guard.  
2 feet by 3 feet. Any size.

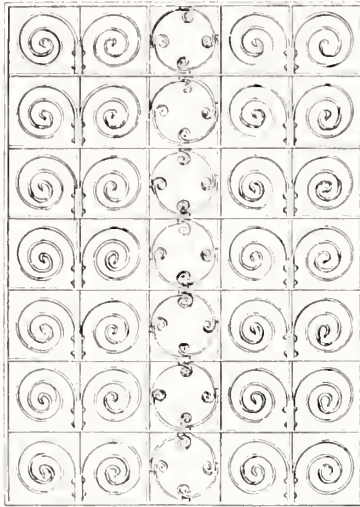


No. 7.  
Wrought and Cast Window Guard.  
2 feet by 3 feet. Any size.



No. 8.  
Cast Grille.  
15 inches high. Any length.

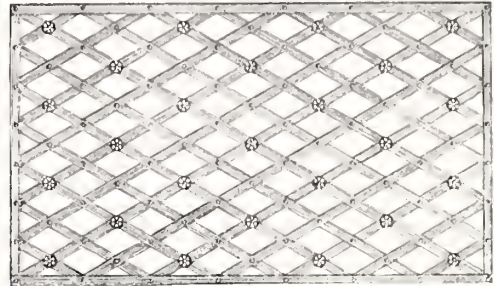
# WINDOW GUARDS AND GRILLES.



No. 22.

Wrought Iron Grille.

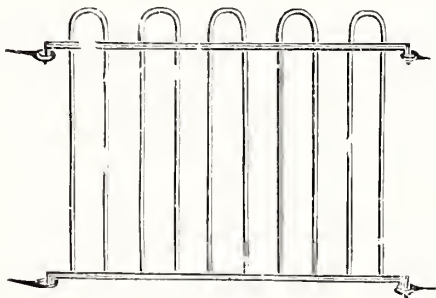
Made any size.



No. 23.

Wrought Iron Grille.

Made any size.



No. 6.

Wrought Iron Window Guard.

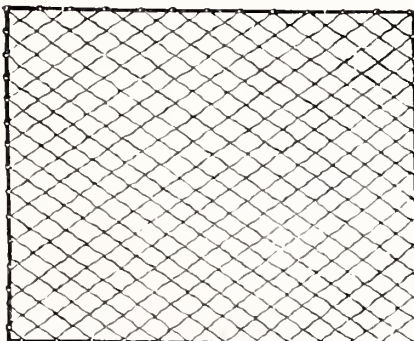
2 feet 6 inches by 2 feet. Any size.



No. 1.

Cast Iron Window Guard.

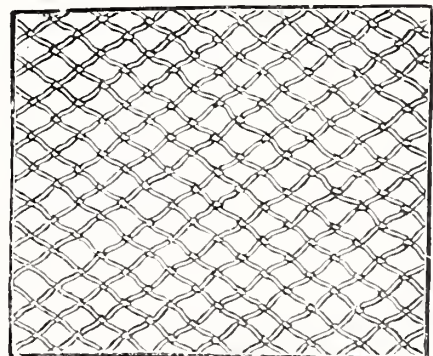
3 feet to 3 feet 6 inches wide,



No. 3.

Wire Guard.

Any size.



No. 2.

Crimped Wire Guard.

Any size.

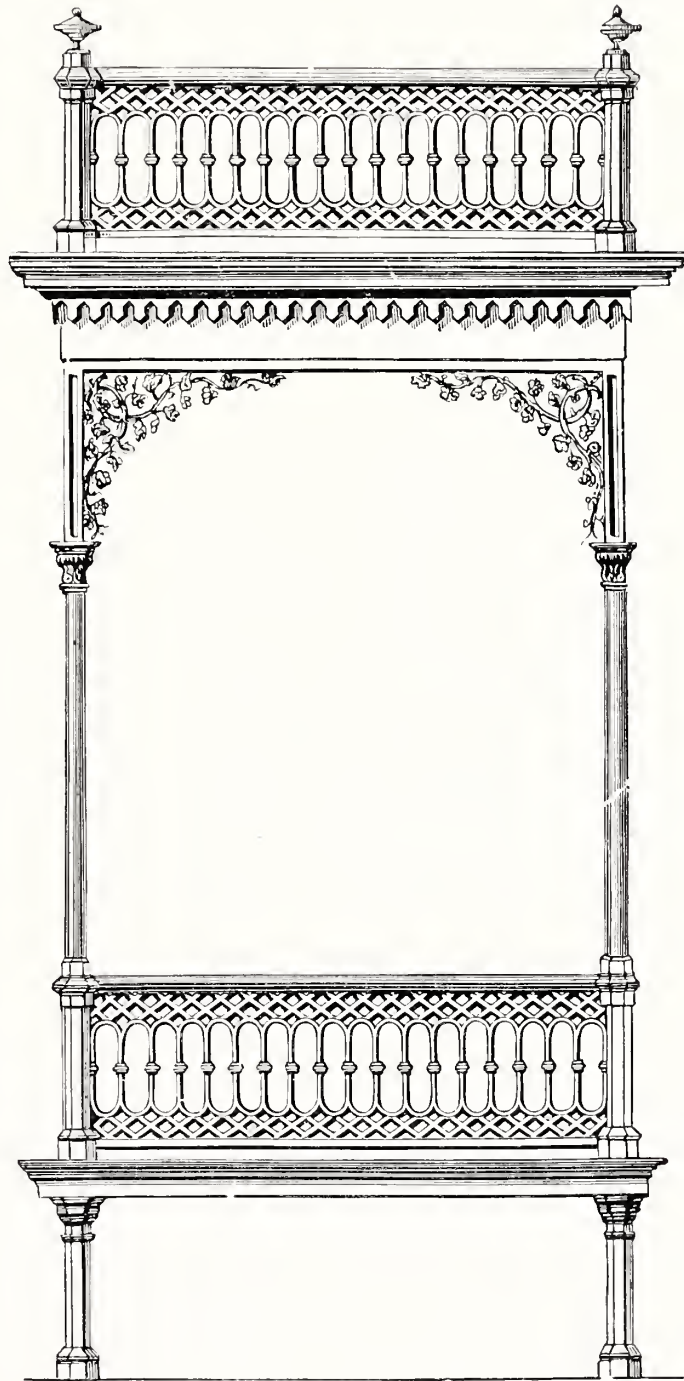
Special Guards, either of Wrought or Cast Iron made after any design furnished.





Verandah No. 2.

Railing No. 13, see page 69. Cresting No. 123, see p. 87. Finials No. 8, see p. 91. Corner Brackets No. 3. Columns 4 in. diam.

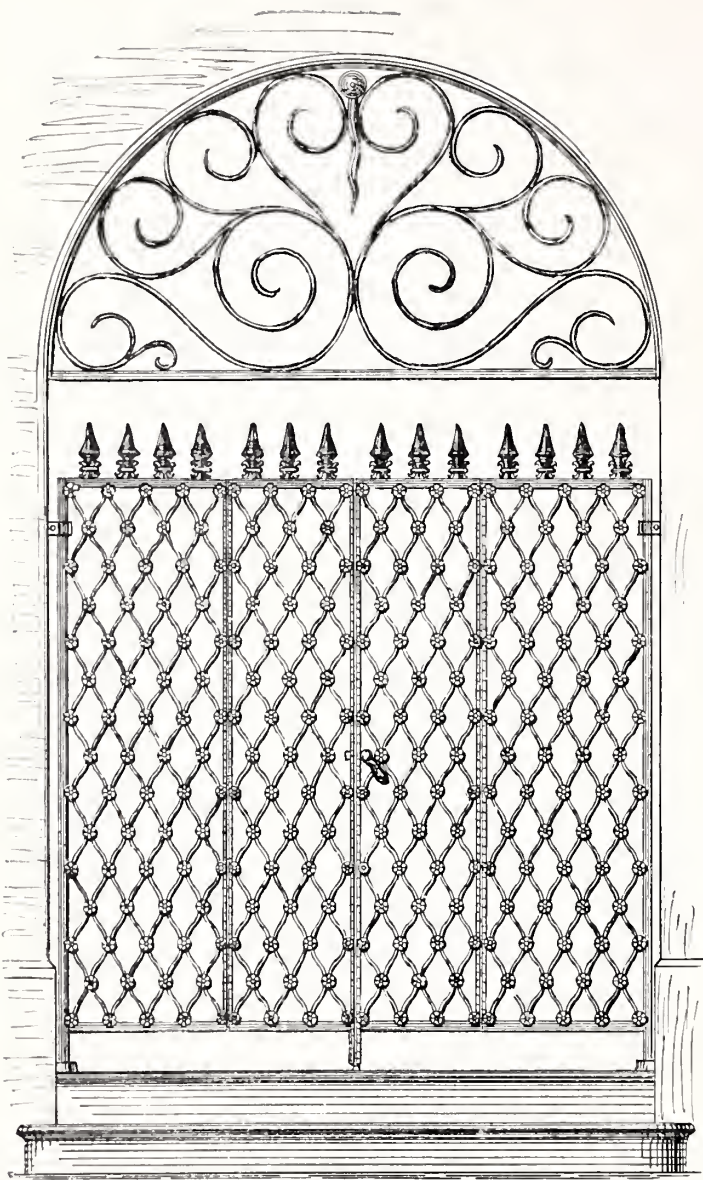


Verandah No. 1.

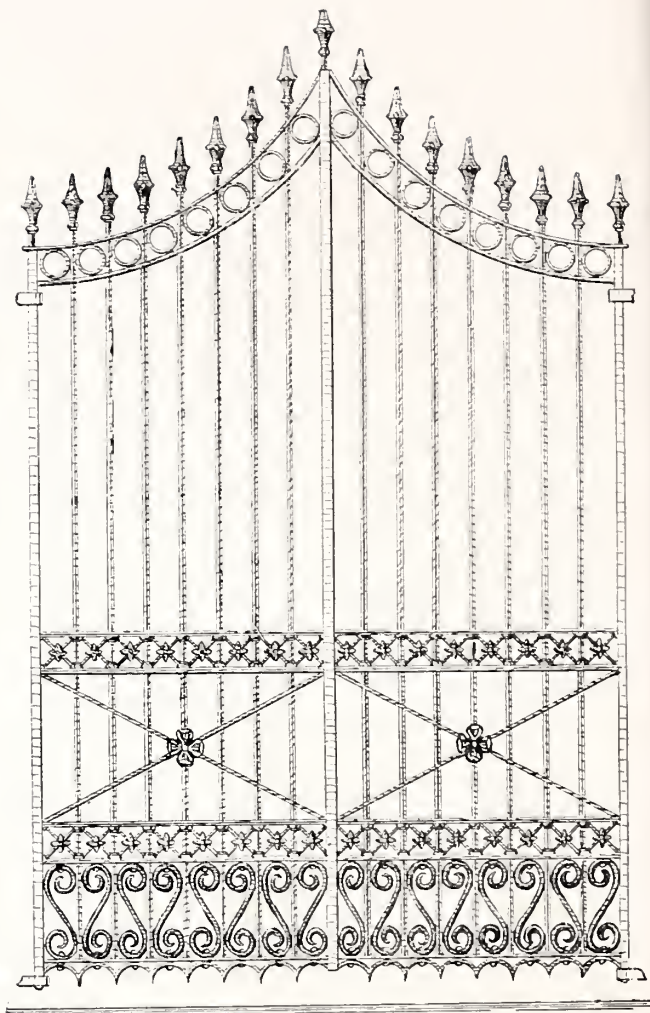
Railing No. 8, see page 69. Post No. 17. Corner Brackets No. 1. Columns 3 inches diameter.

Give height from floor to floor, also length and width on frieze.

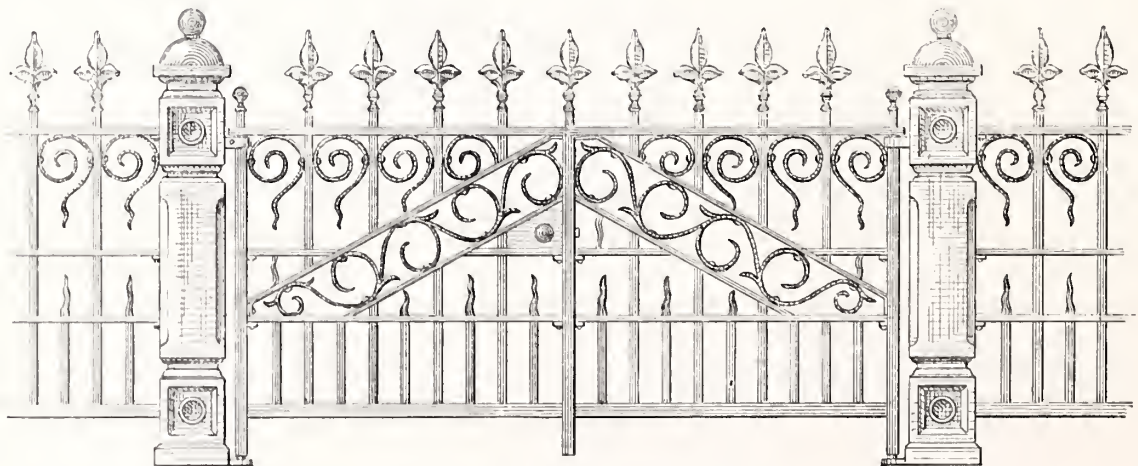




Light Wrought Gate, No. 6. Made any size.  
Wrought Iron Transom Grille, No. 24.



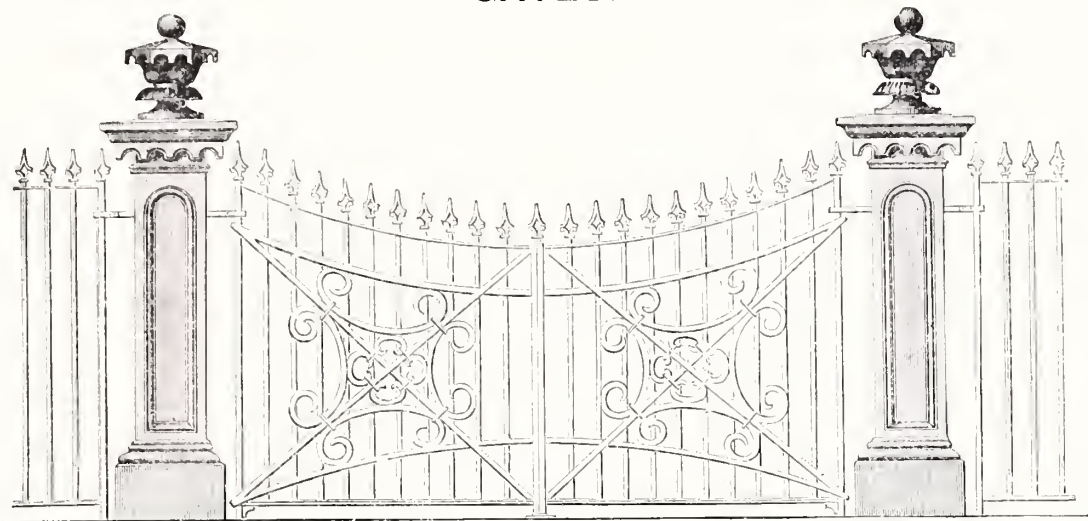
Wrought and Cast Iron Gate, No. 7.  
Made any size.



Wrought Iron Gate, No. 8.

Wrought Iron Railing, No. 70, 3 feet 6 inches high. Cast Iron Posts, No. 25, 3 feet 8 inches high.  
Made any size.

# GATES.

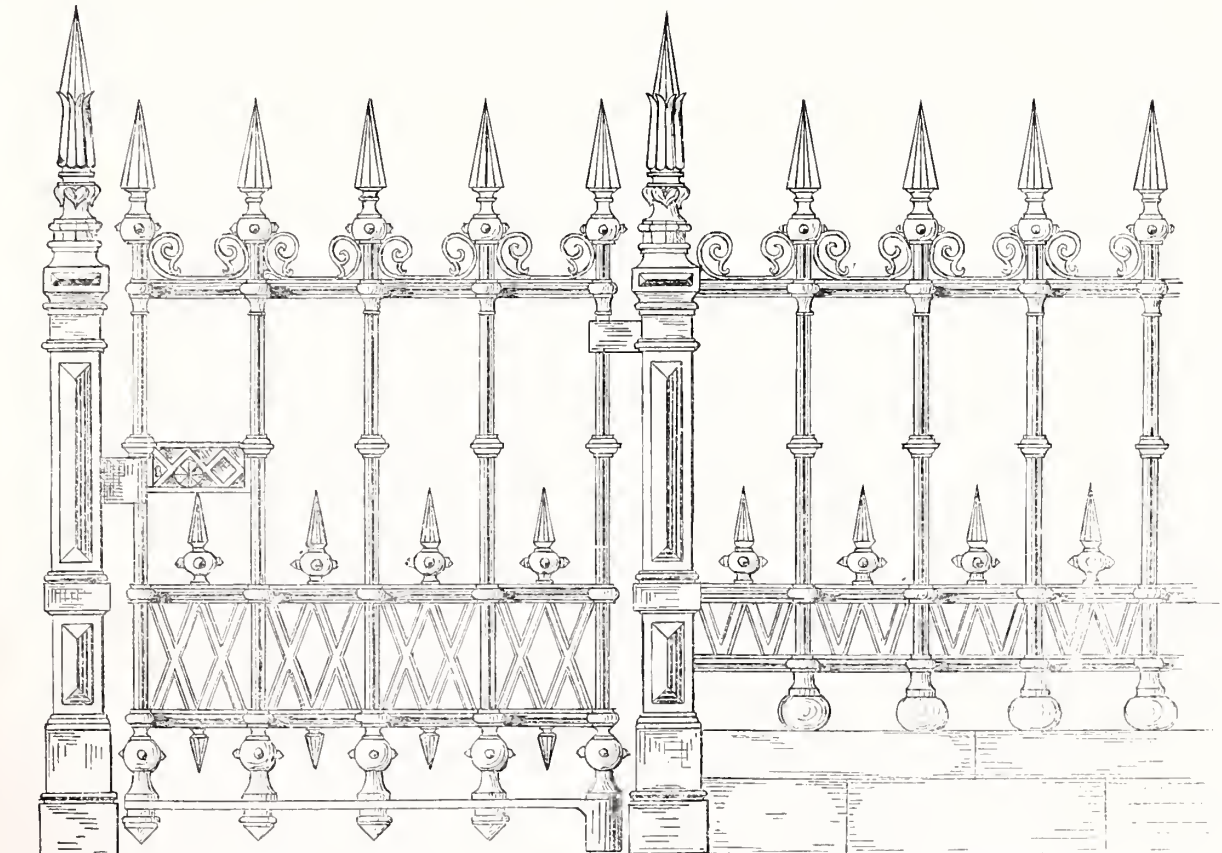


**Carriage Gate No. 3.**

10 feet wide. 6 feet high at Posts. Can be made any size.

**Railing No. 10.**

6 feet high. Post No. 14, 7 feet 6 inches high.



**Gate No. 2.**

4 feet high, 3 feet wide.

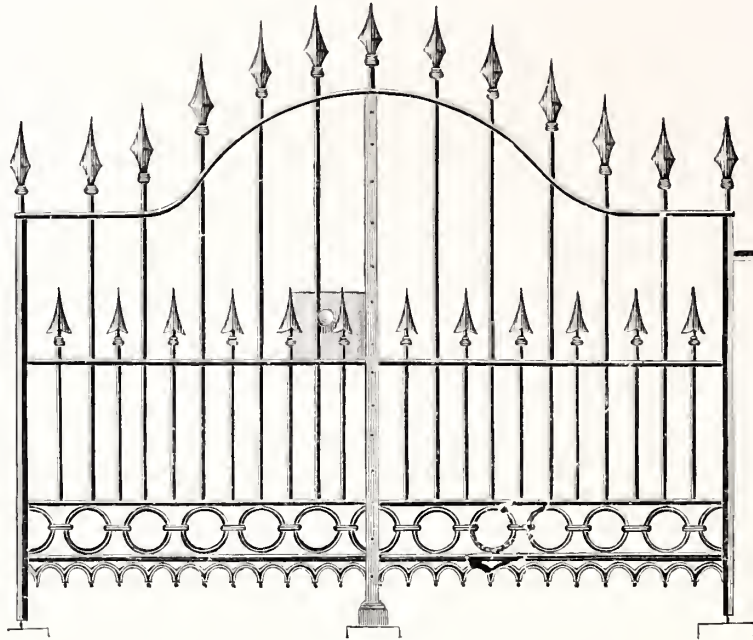
Post No. 5, 4 feet 6 inches high.

**Railing No. 49.**

3 feet 6 inches high.



## GATES.



No. 1.

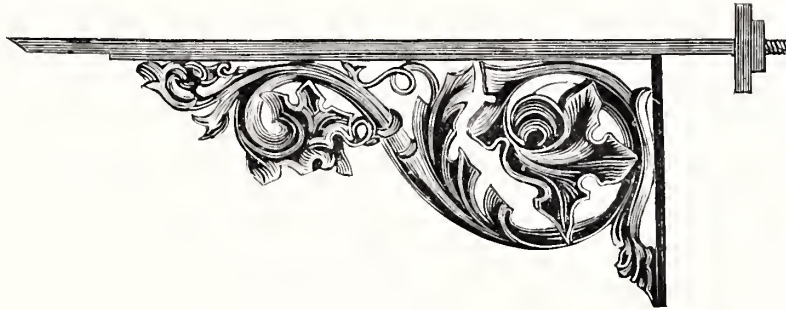
5 feet wide. Can be made any height.



No. 4.

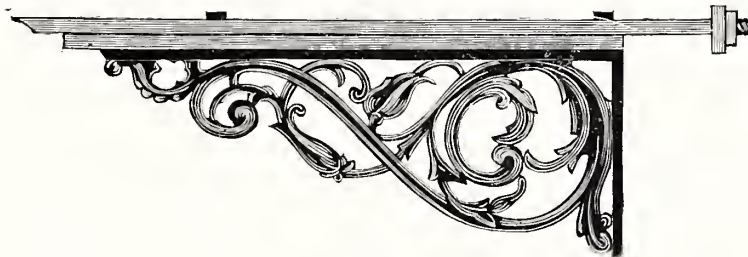
4 feet 6 in. wide. 5 feet 8 in. high. Post No. 3, 4 feet 3 in. high; can be made any height.

# BALCONY BRACKETS.



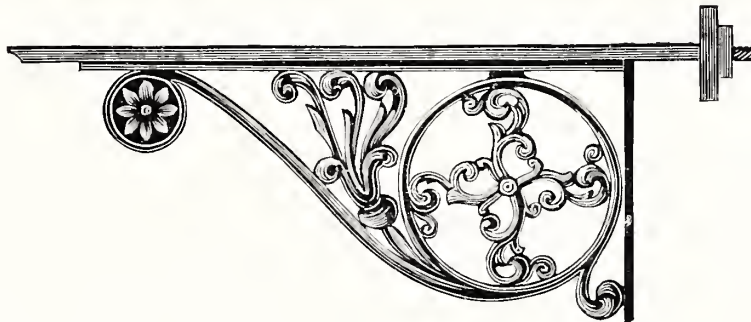
No. 1.

3 feet by  $12\frac{1}{4}$  inches.  
Made for any thickness of wall.



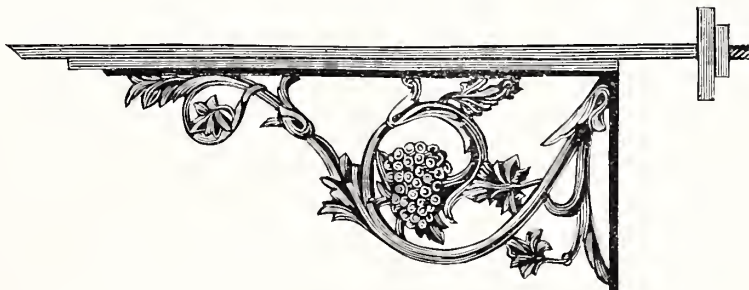
No. 2.

3 feet by  $11\frac{1}{2}$  inches.  
Made for any thickness of wall.



No. 3.

3 feet by  $10\frac{3}{4}$  inches.  
Made for any thickness of wall.

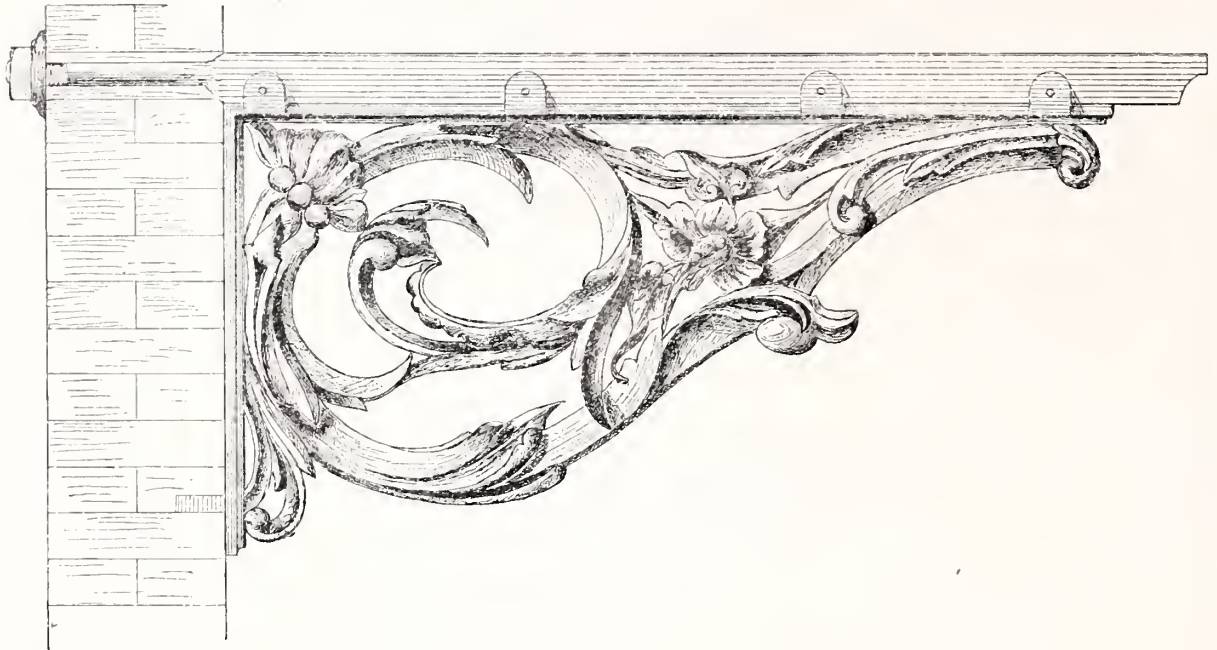


No. 4.

3 feet by 10 inches.  
Made for any thickness of wall.



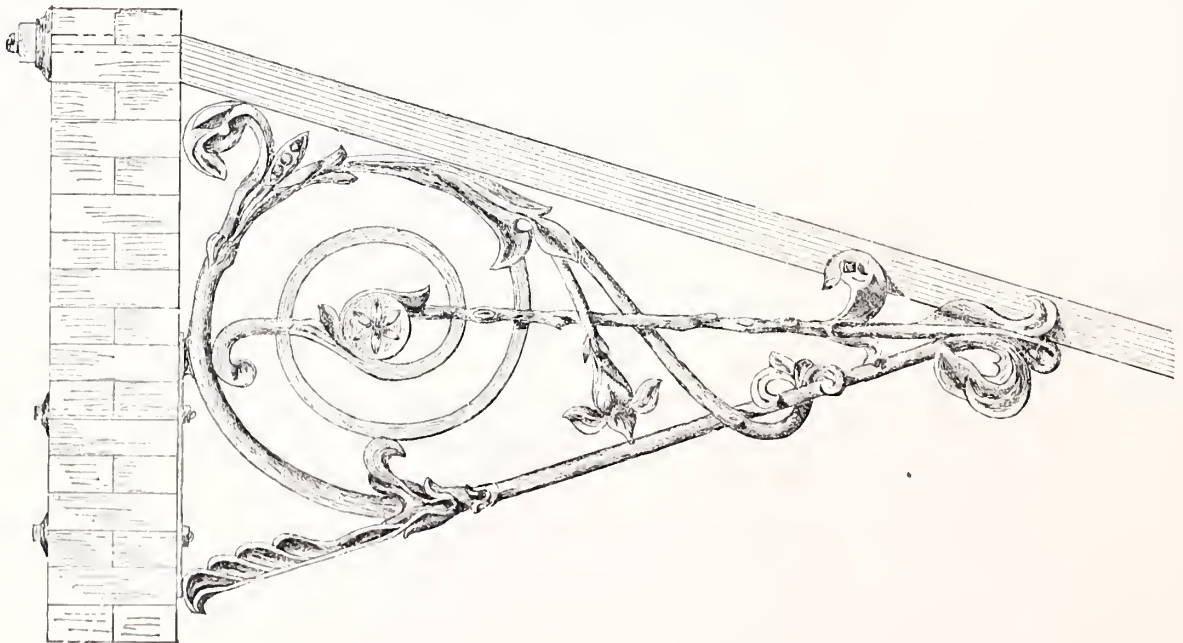
## BALCONY BRACKETS.



No. 5.

4 feet 3 inches by 2 feet 1 inch. Made for any thickness of wall.

## AWNING BRACKET.



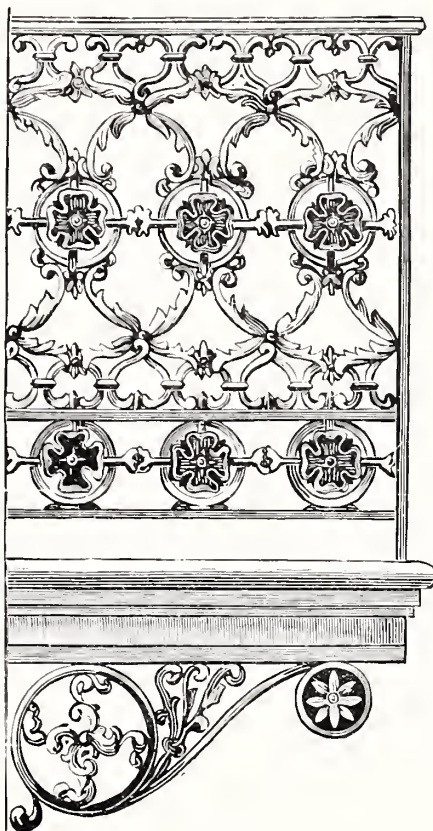
No. 6.

Bracket for Awning over sidewalk.

Ornamental part 5 feet projection by 3 feet deep. Top bar of size to suit the projection required.

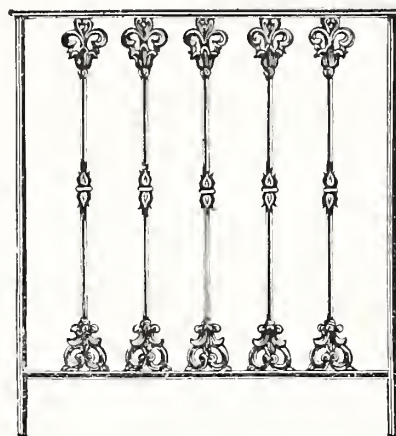
# BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.



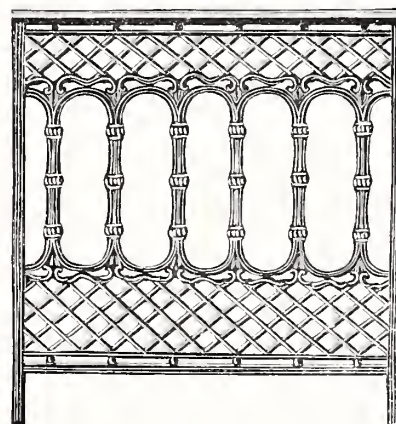
No. 3.

2 feet  $3\frac{1}{4}$  inches high.



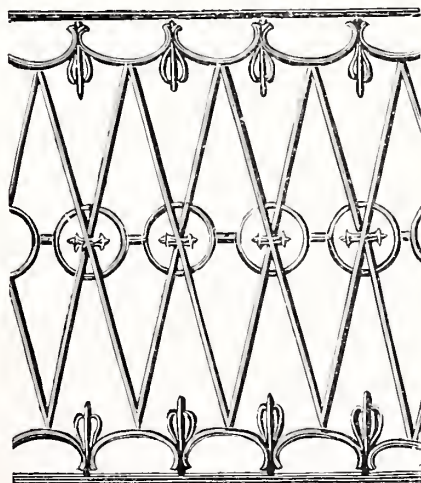
No. 6.

2 feet 6 inches high.



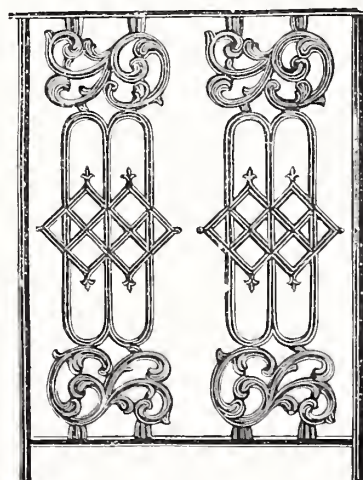
No. 8.

2 feet  $5\frac{1}{4}$  inches high.



No. 11.

2 feet 9 inches high.



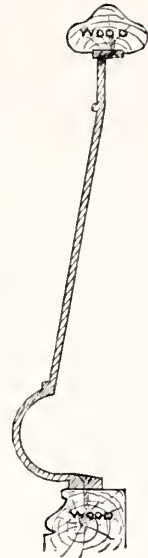
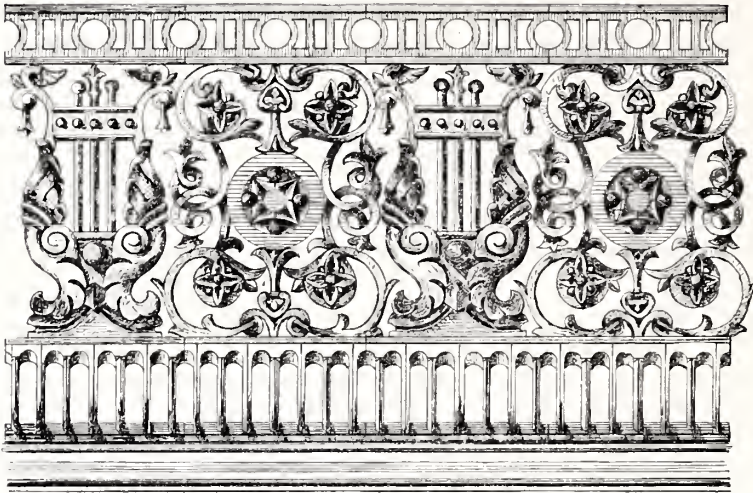
No. 13.

2 feet  $8\frac{1}{2}$  inches high.



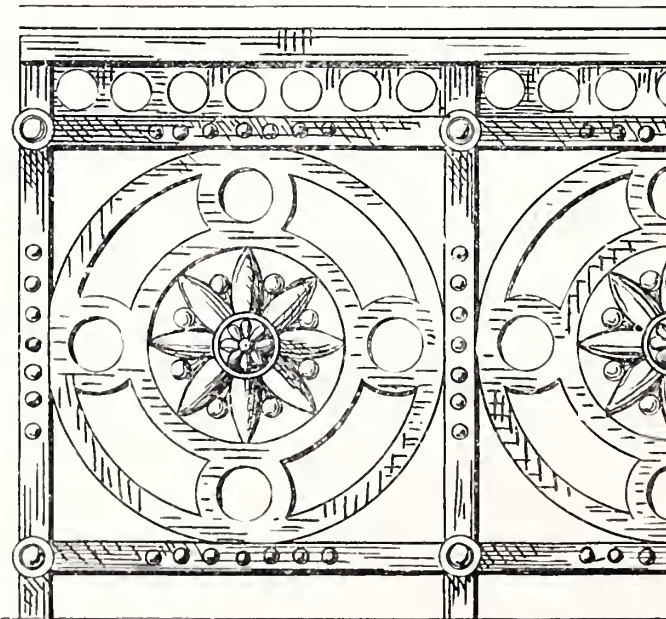
## BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.



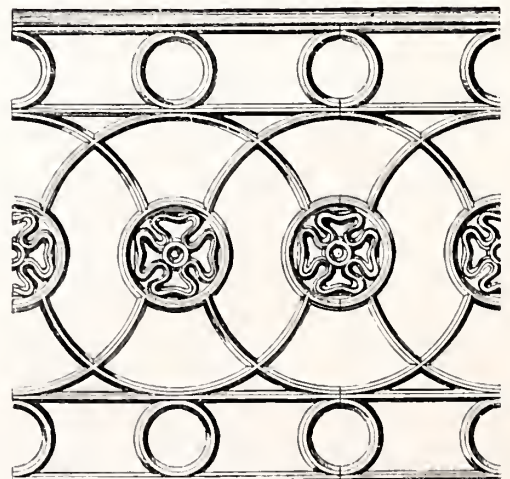
No. 64.

1 foot 2½ inches high. For Music Halls or Theatres.



No. 26.

2 feet 10 inches high.

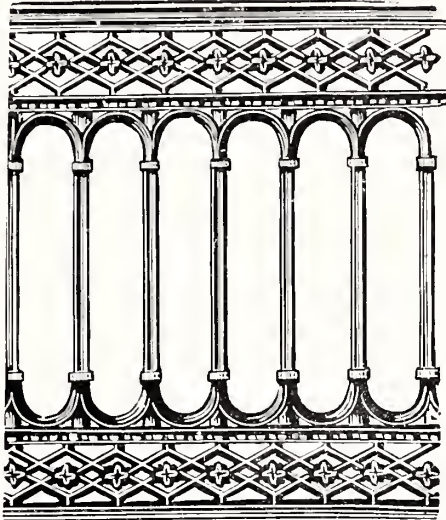


No. 71.

2 feet 7 inches high.

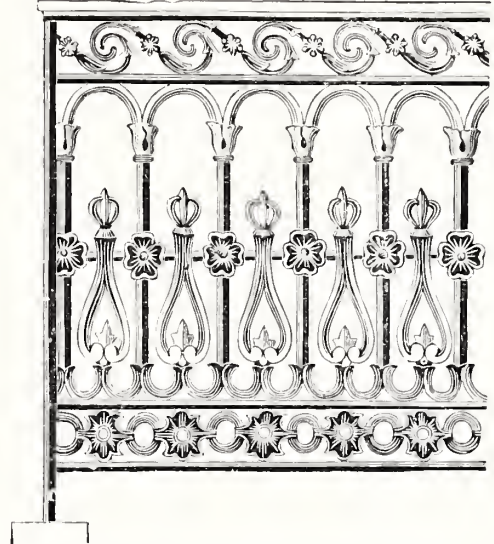
# BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.



No. 21.

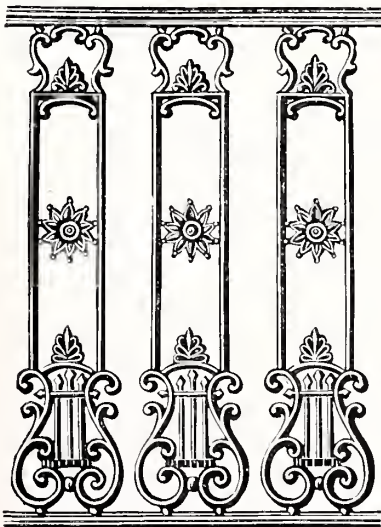
2 feet 10 inches high.



No. 9.

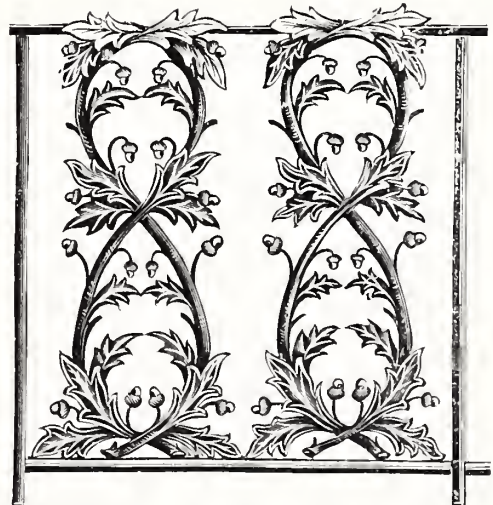
2 feet 7½ inches high.

Without Upper Scroll, 2 feet 4 inches.



No. 23.

2 feet 10 inches high.



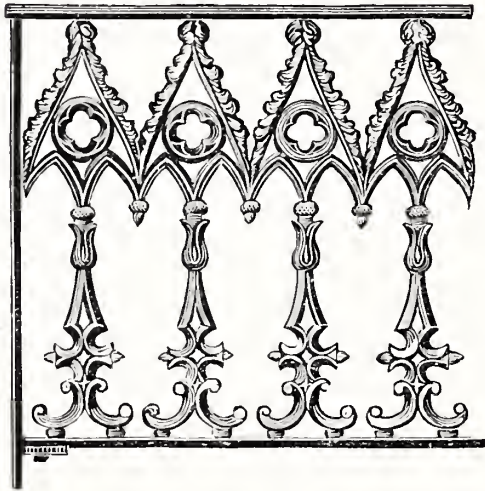
No. 5.

2 feet 8½ inches high.



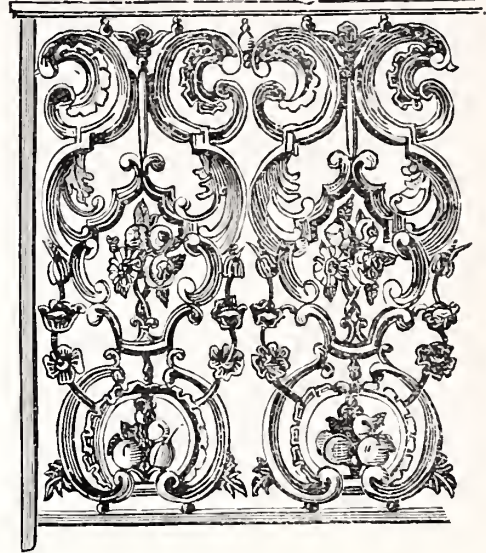
## BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.



No. 14.

2 feet 10 inches high.



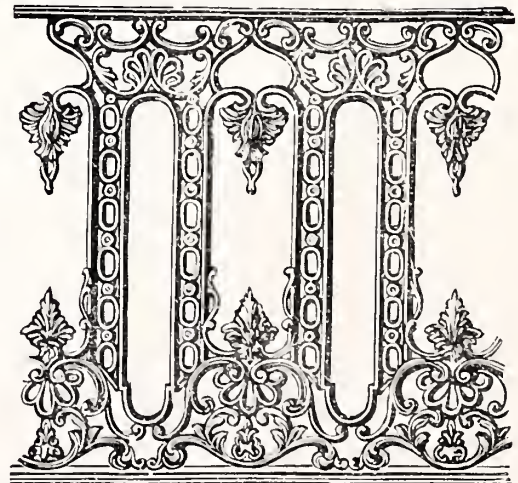
No. 18.

2 feet 11 inches high.



No. 20.

2 feet 6¾ inches high.

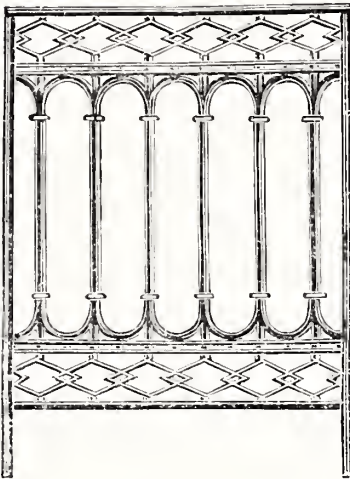


No. 19.

2 feet 10 inches high.

# BALCONY RAILINGS.

GIVE MEASUREMENTS ON FRIEZE OF CORNICE.



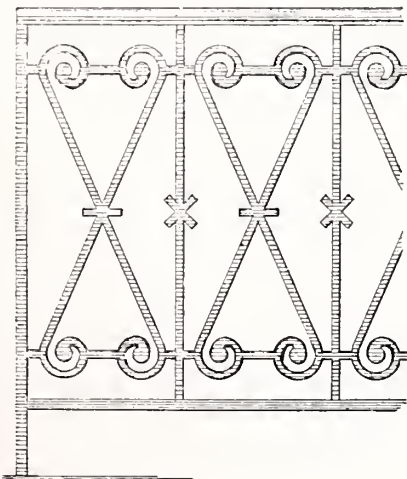
No. 15.

2 feet 10 inches high.



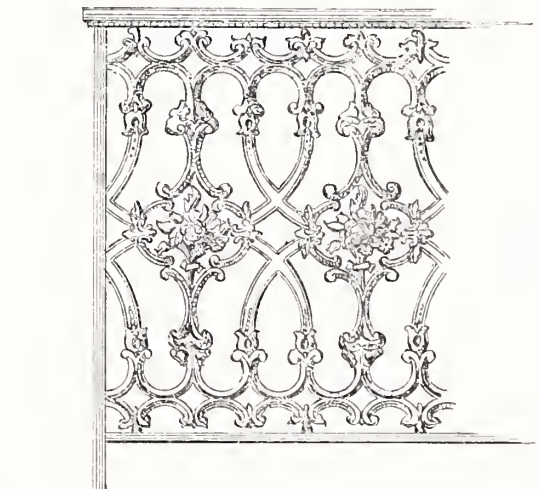
No. 16.

2 feet 4½ inches high.



No. 73.

Wrought and Cast. 2 feet 6 inches high.

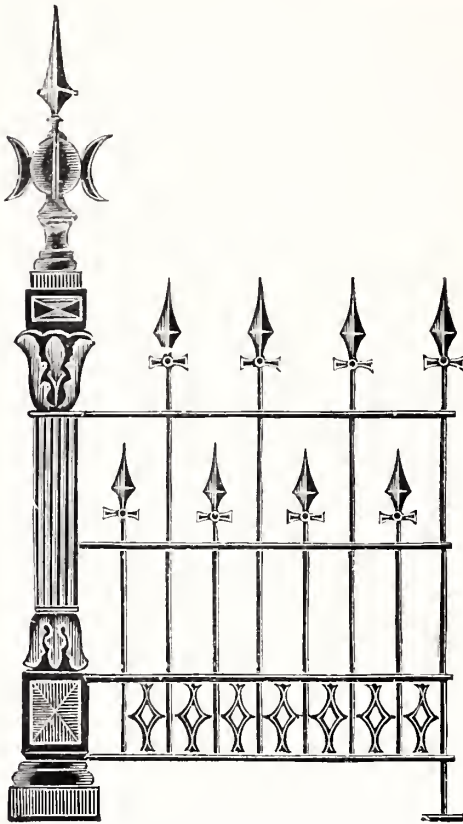


No. 69.

2 feet 11 inches high.

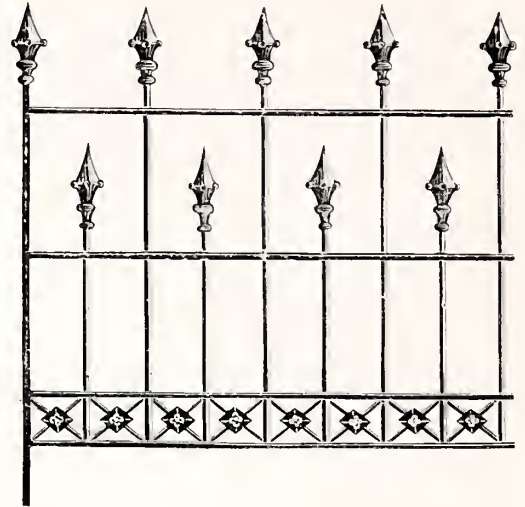


## RAILINGS.



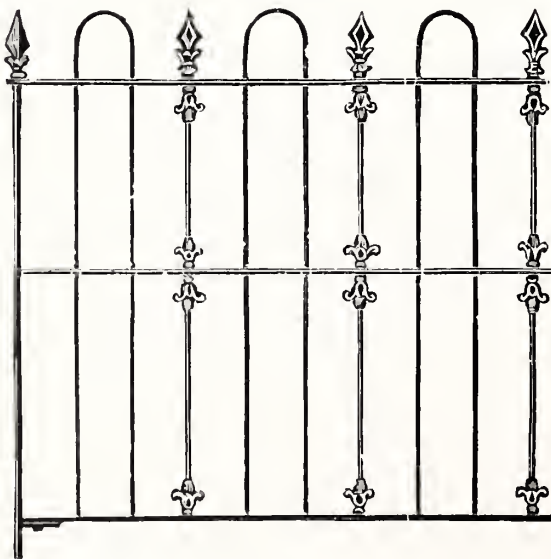
No. 47.

3 feet 6 inches high.  
Can be made any size.  
Post No. 1, 5 feet 5 inches high.



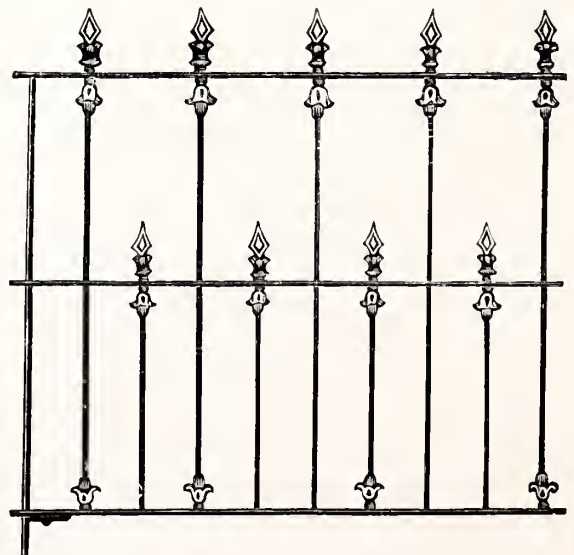
No. 41.

3 feet 6 inches high.  
Can be made any height.



No. 31.

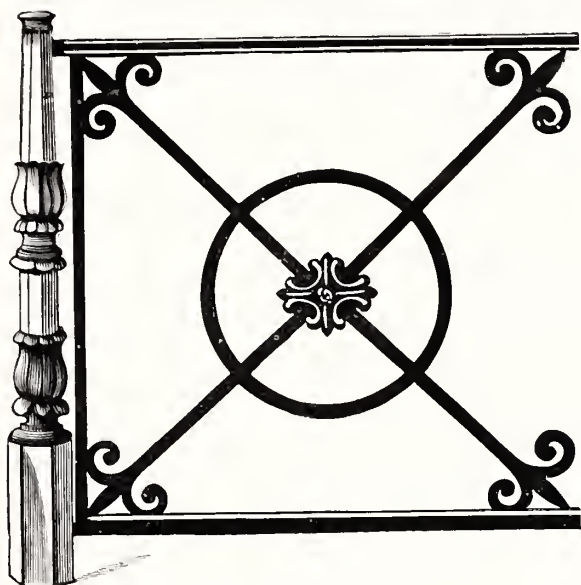
3 feet high.  
Can be made any height.



No. 29.

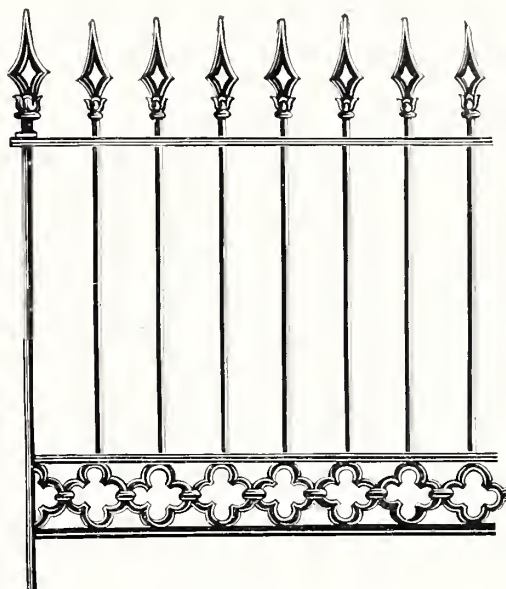
3 feet high.  
Can be made any height.

RAILINGS.



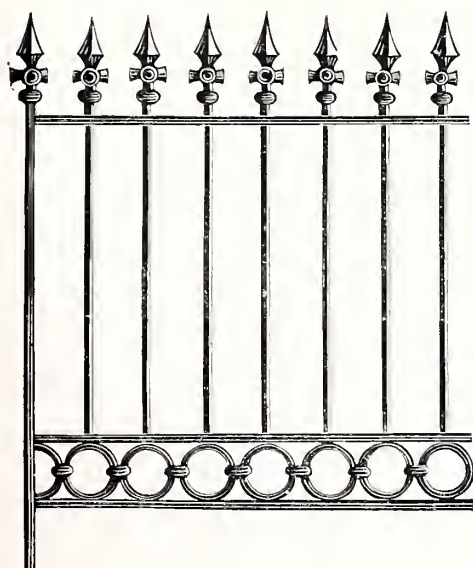
No. 25.

2 feet 8 inches high.  
Can be made any size.  
Post No. 2, 2 feet 8 inches high.



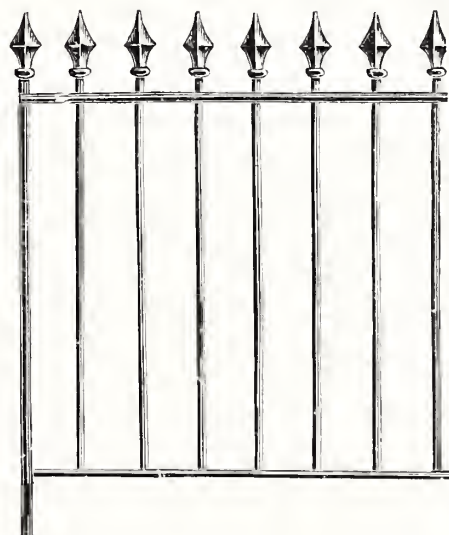
No. 38.

3 feet 6 inches high.  
Can be made any height.



No. 43.

3 feet 6 inches high.  
Can be made any height.



No. 46.

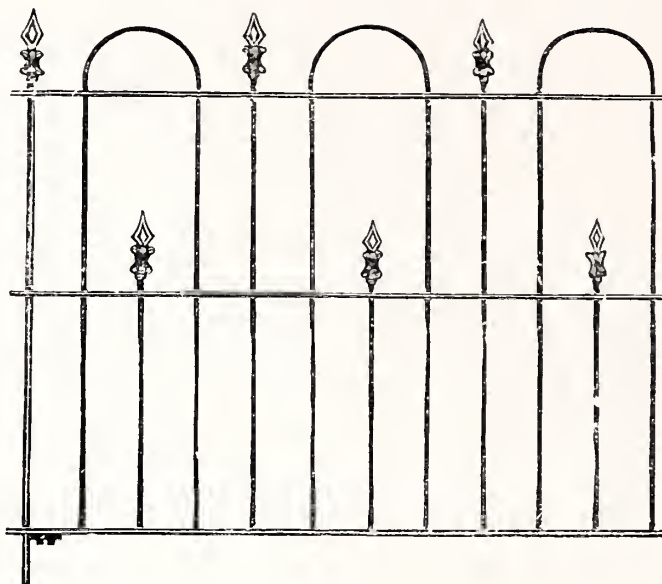
3 feet high.  
Can be made any height.



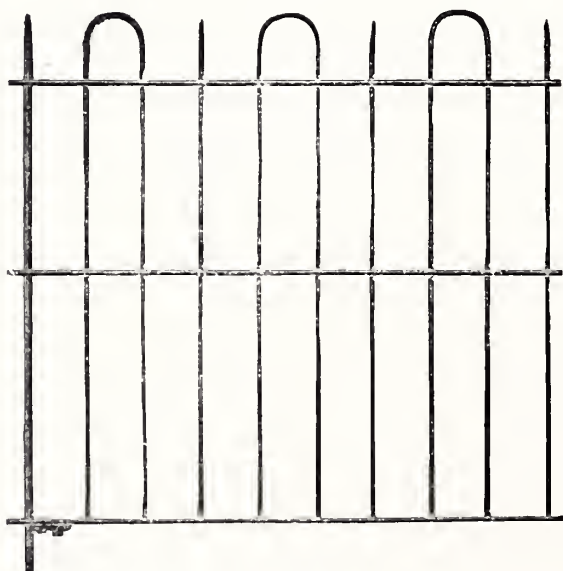
## RAILINGS.



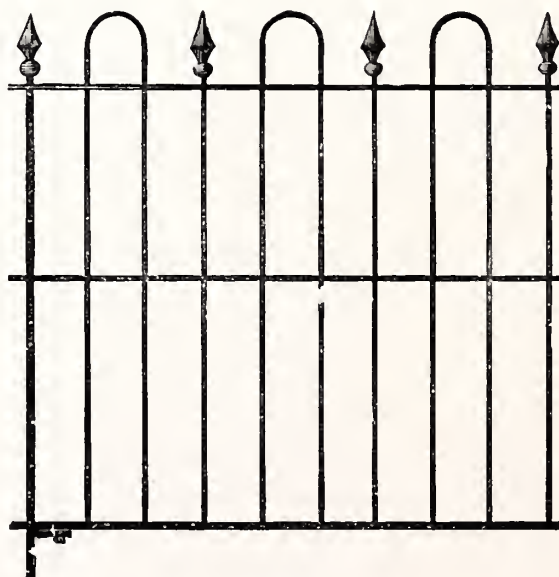
No. 34.  
3 feet high.  
Can be made any height.



No. 36.  
3 feet high.  
Can be made any height.

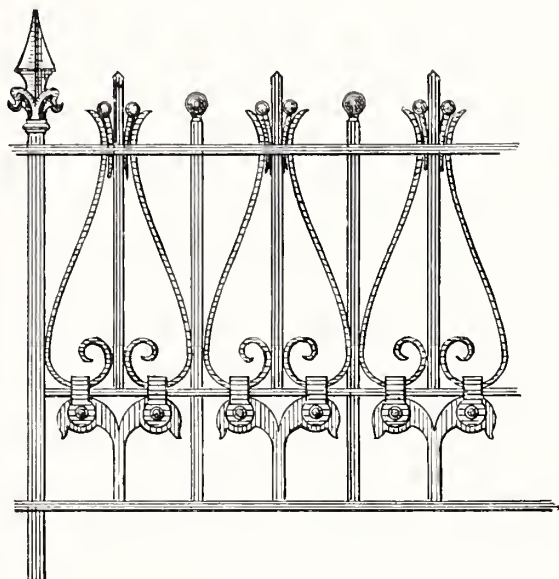


No. 33.  
3 feet high.  
Can be made any height.



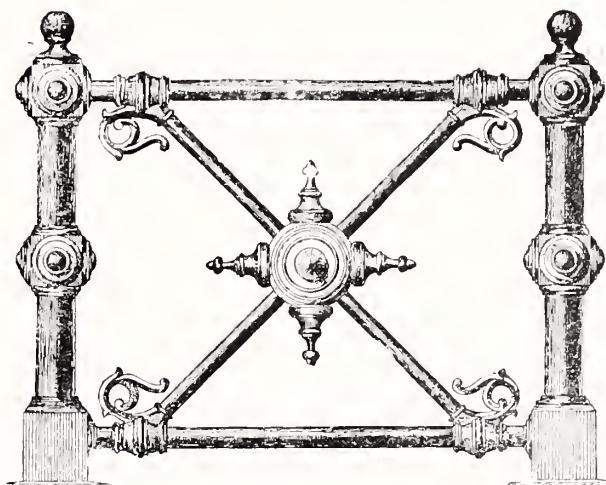
No. 30.  
3 feet high.  
Can be made any height.

# RAILINGS.



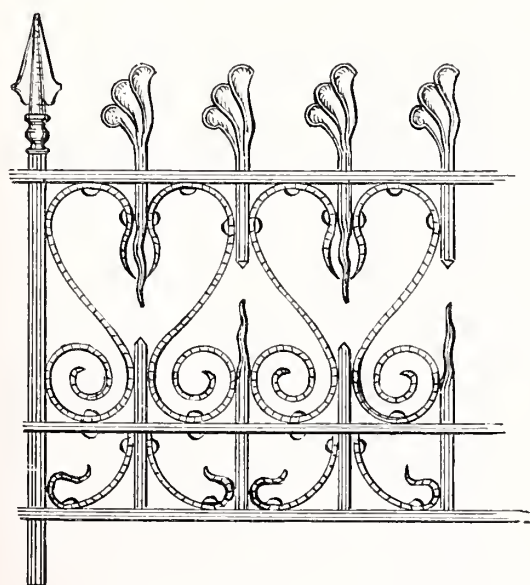
No. 74.

Cast and Wrought.  
2 feet 6 inches high.



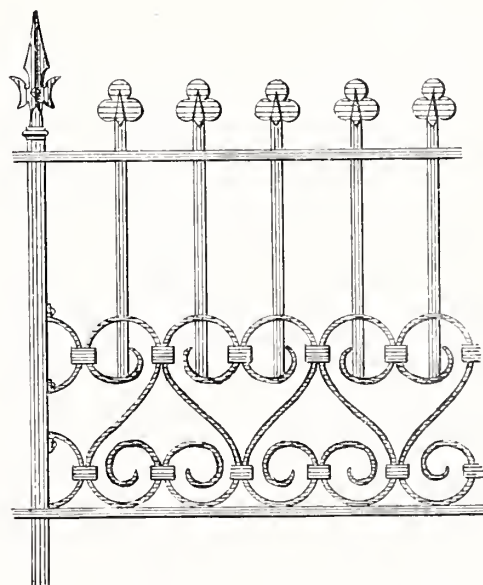
No. 16.

2 feet 9 inches high.  
Post No. 16, 3 feet 7 inches high.



No. 75.

All Wrought Iron.  
3 feet 6 inches high.

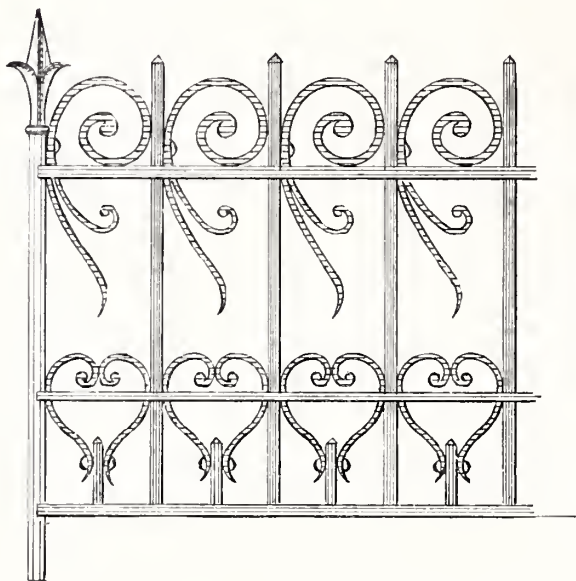


No. 76.

All Wrought Iron.  
3 feet 6 inches high.

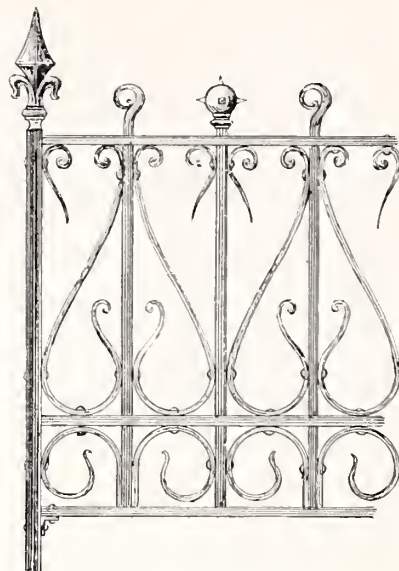


## RAILINGS.



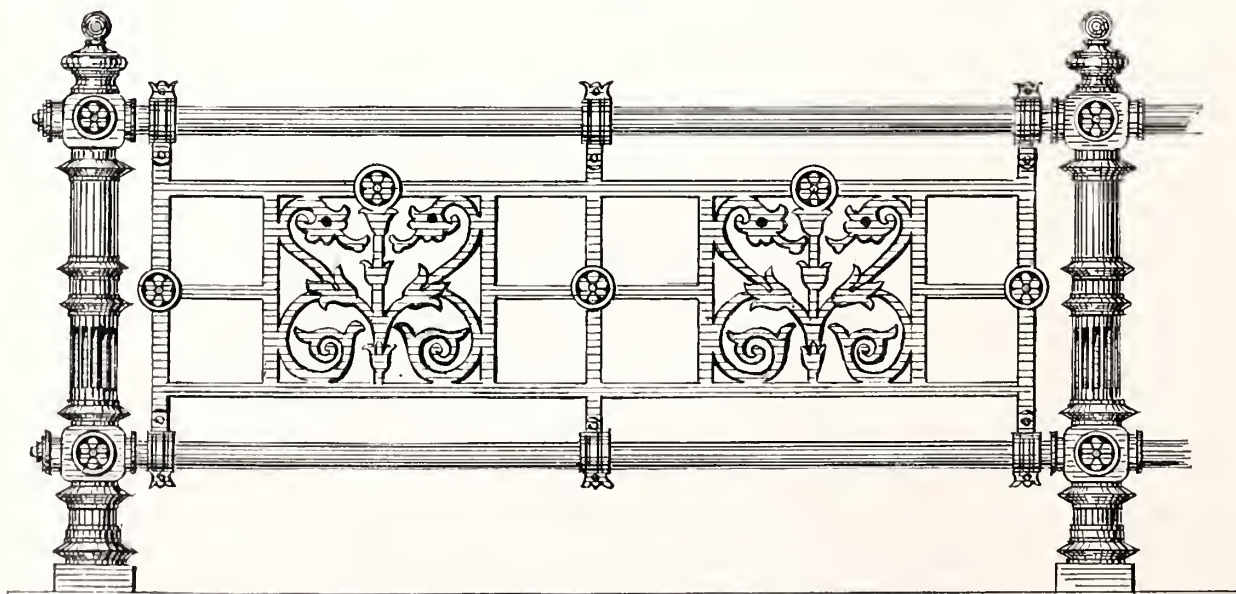
No. 77.

All Wrought Iron.  
3 feet 6 inches high.



No. 78.

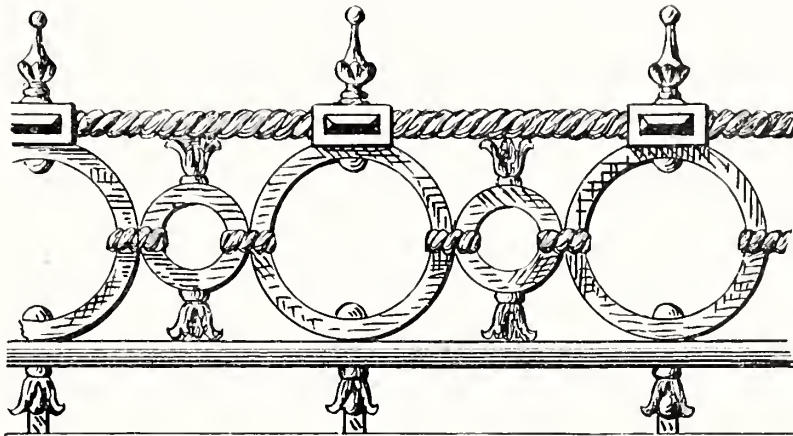
All Wrought Iron.  
3 feet 6 inches high.



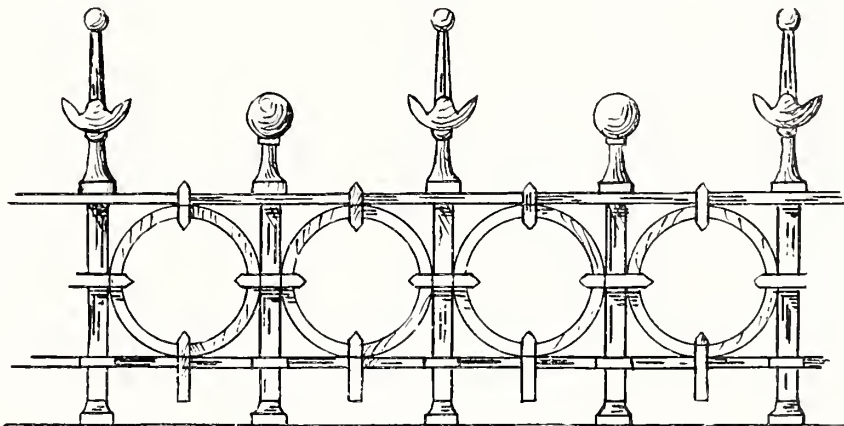
No. 79.

1 foot 10 inches high.  
Post No. 27, 2 feet 2 inches high.

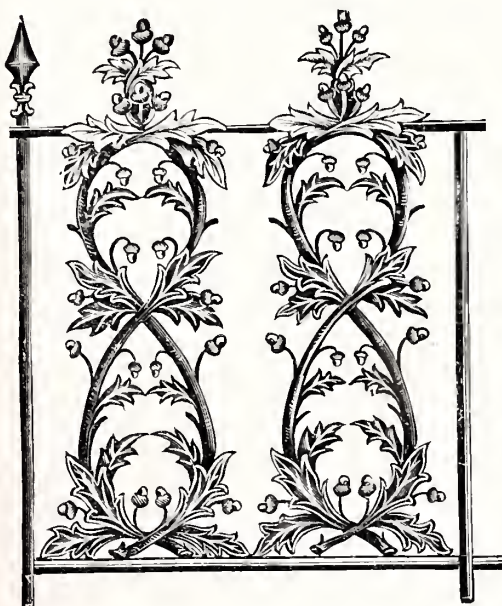
RAILINGS.



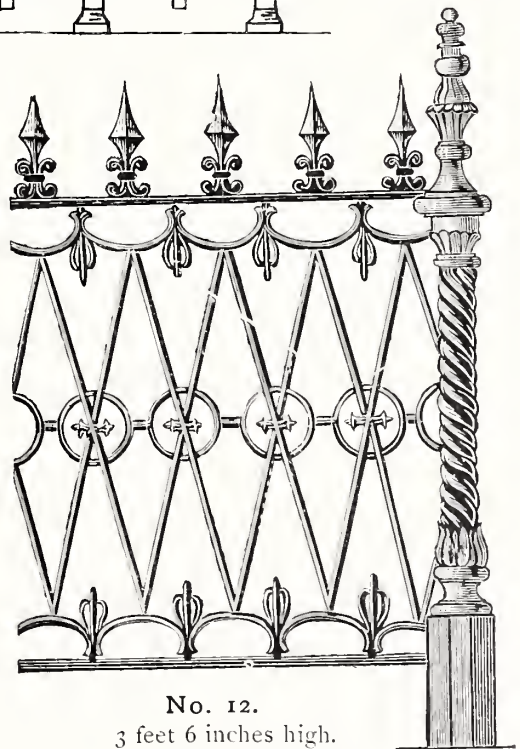
No. 53.  
2 feet high.



No. 56.  
2 feet high.



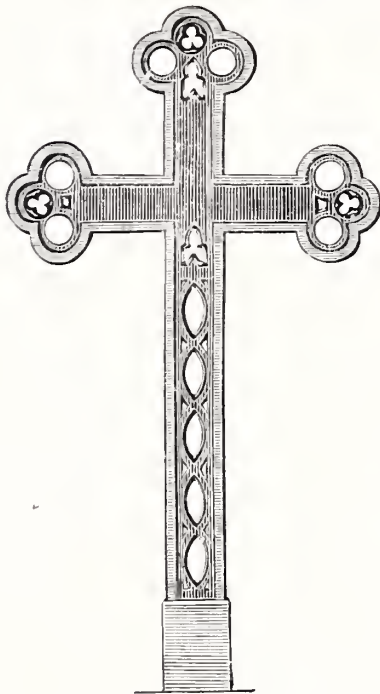
No. 2.  
3 feet 4 inches high.



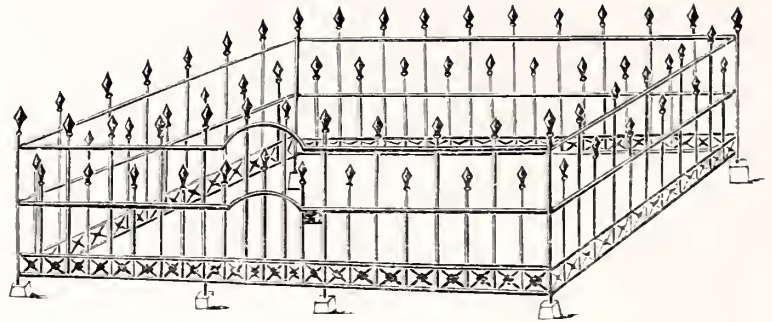
No. 12.  
3 feet 6 inches high.  
Post No. 8, 3 feet 10 inches high.



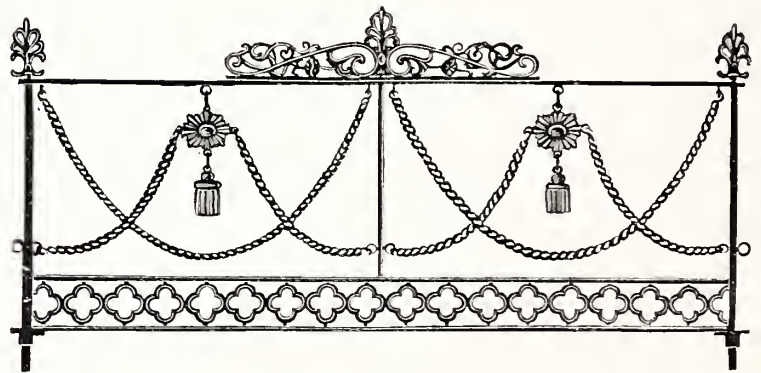
## RAILINGS.



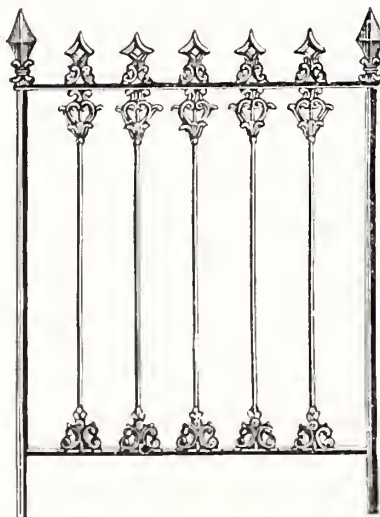
Cemetery Cross.  
4 feet high.  
With or without lettering.



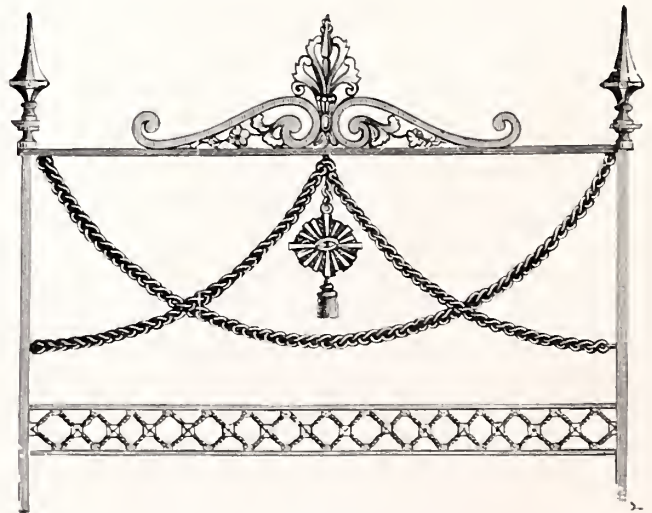
No. 41.  
Any size.



No. 55.  
3 feet 2 inches high. Any size.

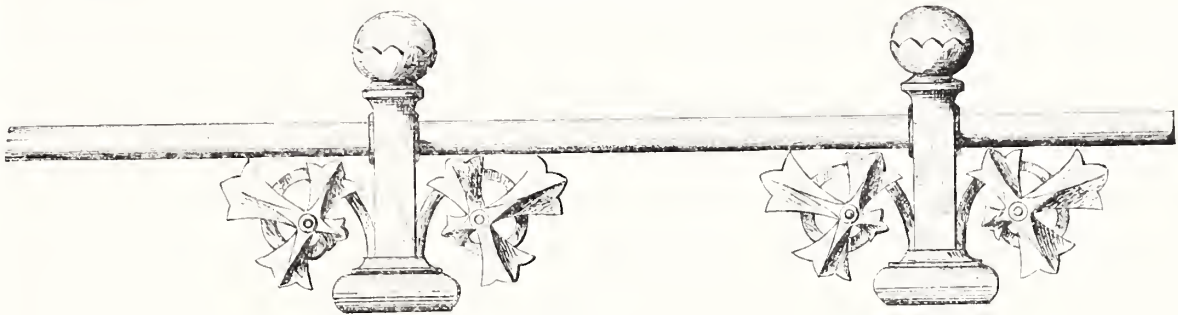


No. 7.  
3 feet high.



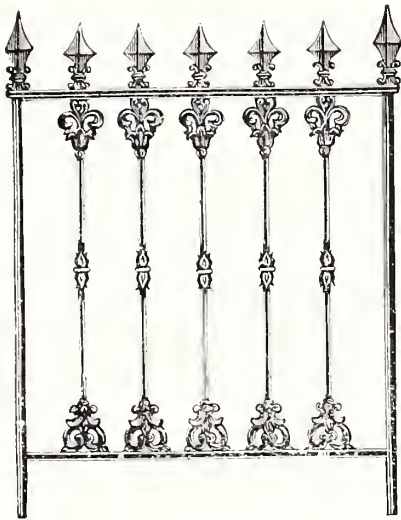
No. 54.  
3 feet 4 inches high. Any size.

RAILINGS.



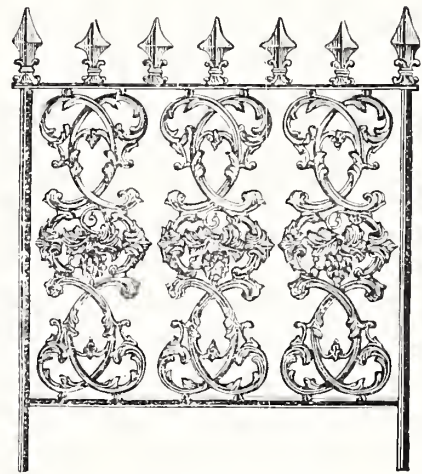
No. 50.

1 foot high. Post No. 13, 1 foot 6 inches high.



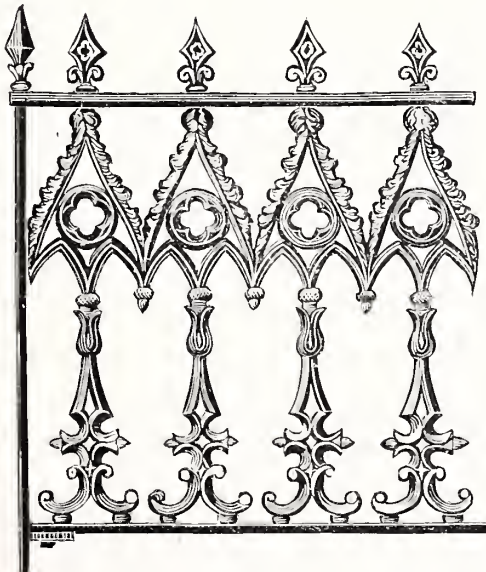
No. 4.

3 feet high.



No. 17.

2 feet 10 inches high.



No. 20.

3 feet 4 inches high.

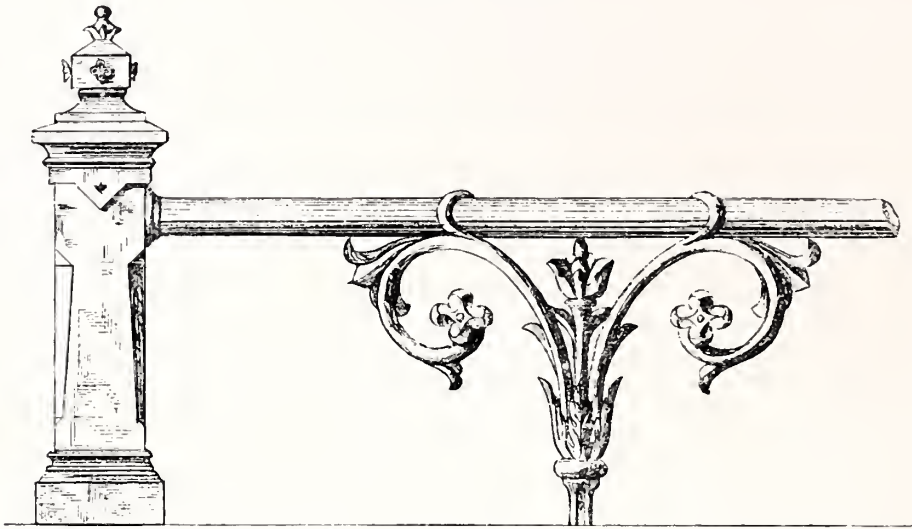


No. 22.

3 feet 2 inches high.

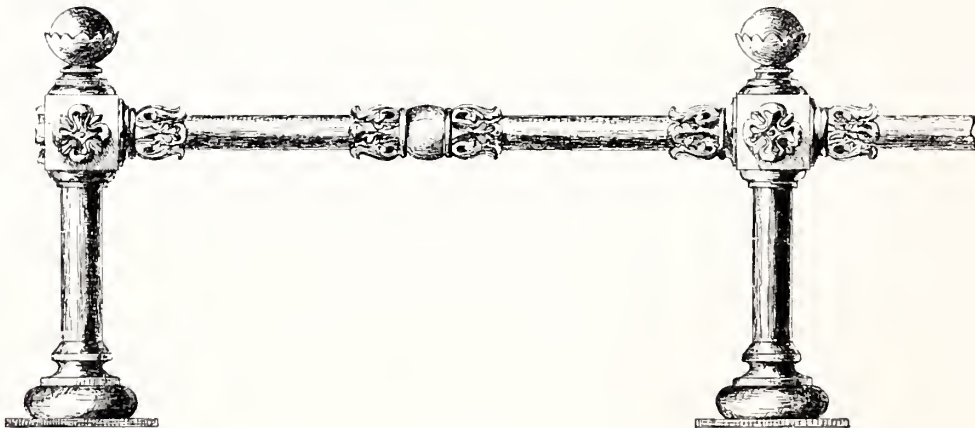


## RAILINGS.



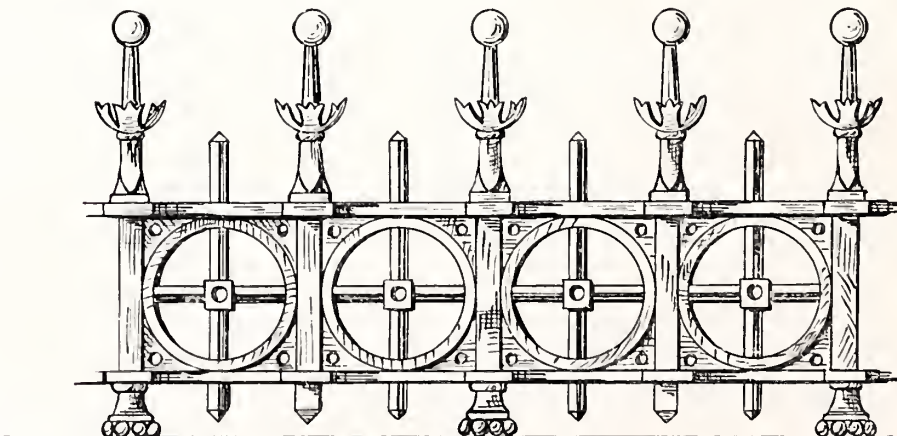
No. 51.

1 foot 7 inches high. Post No. 12, 2 feet 6 inches high.



No. 68.

1 foot 7 inches high. Post No. 15, 2 feet 2 inches high.



No. 52.

2 feet high.

RAILING POSTS.



No. 6.

4 feet 2½ inches high.



No. 20.

2½ inches diameter by  
3 feet 4 inches high.



No. 9.

3 feet 6 inches high.



No. 16.

3 feet 6 inches high.



No. 3.

4 feet 3 inches high.



No. 2.

3 feet 2 inches high.



No. 18.

3 feet 3 inches high.

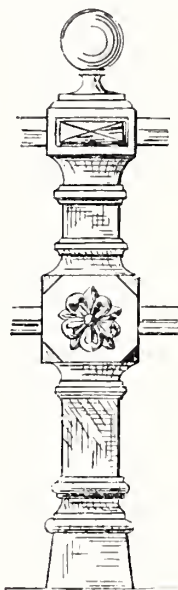


No. 19.

3 feet 5½ inches high.



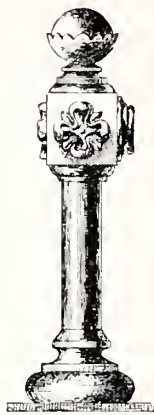
## RAILING POSTS.



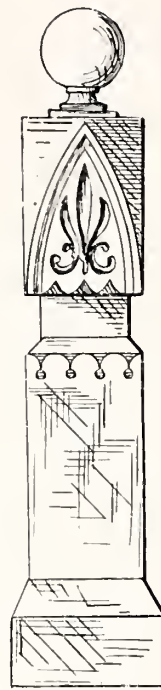
No. 21.  
3 feet 3½ inches high.



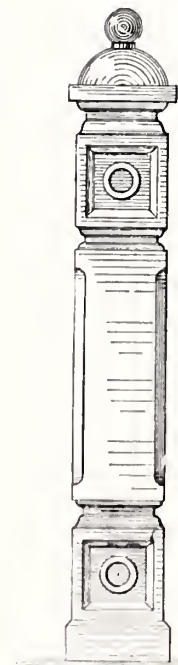
No. 10.  
1 foot 10 inches high.



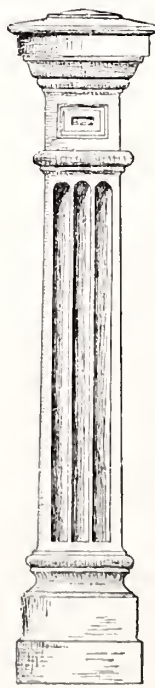
No. 15.  
2 feet 2 inches high.



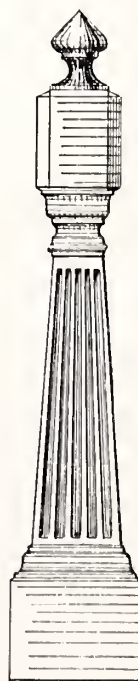
No. 23.  
8 in. by 8 in. by 3 ft. 9½ in.



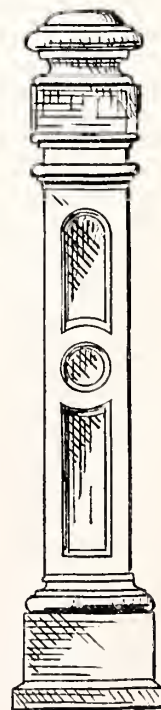
No. 25.  
3 feet 6 inches high.



No. 22.  
5 in. by 3½ in. by 4 ft. 4½ in.

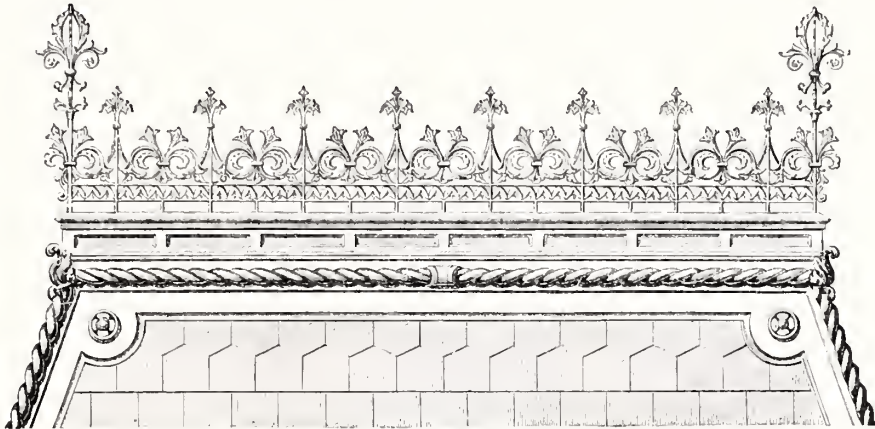


No. 26.  
3 feet 4 inches high.



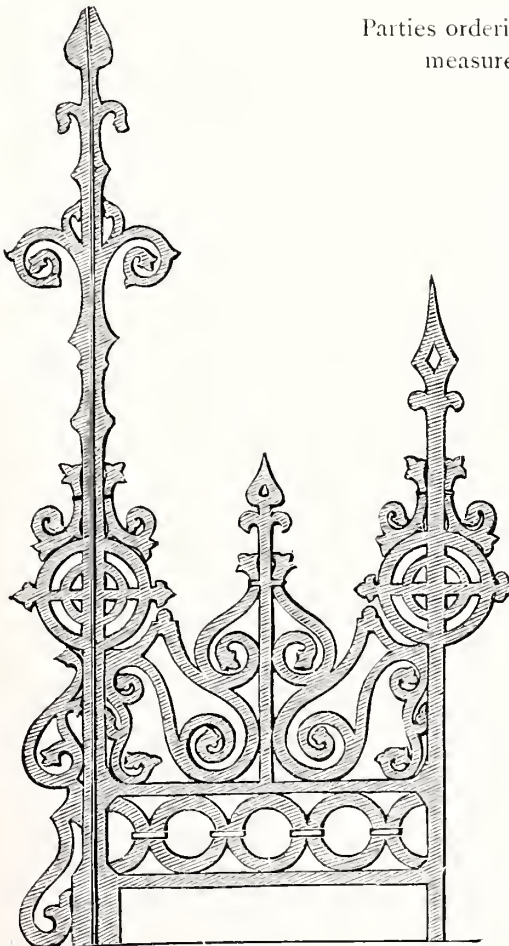
No. 7.  
3 feet 3 inches high.

# ROOF CRESTINGS AND FINIALS.

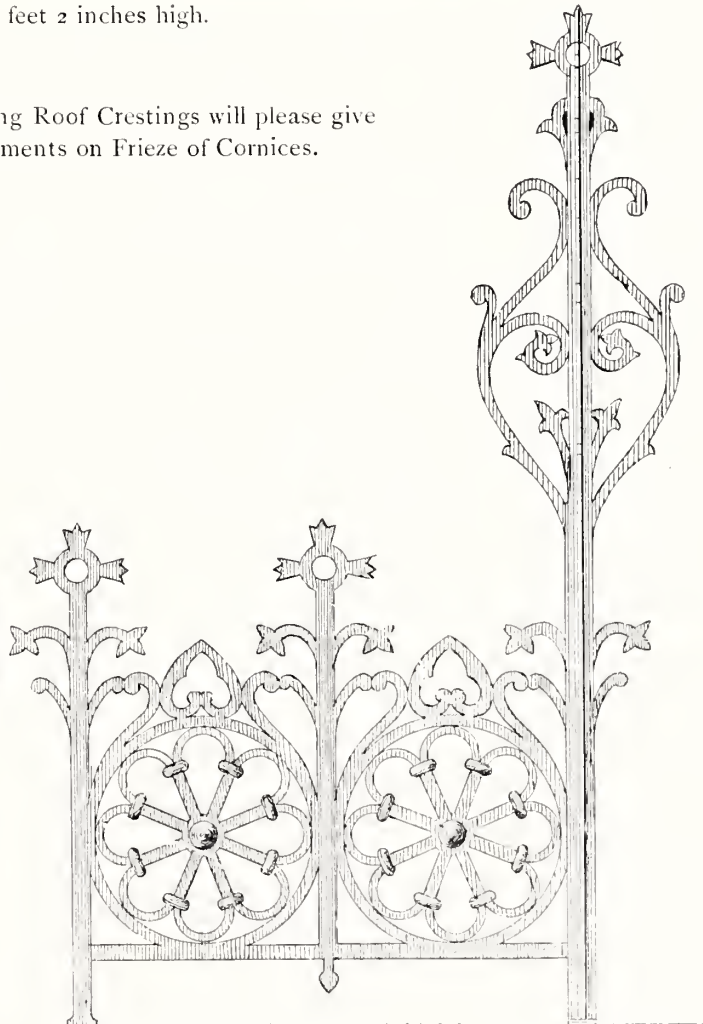


No. 101.  
2 feet 2 inches high.

Parties ordering Roof Crestings will please give  
measurements on Frieze of Cornices.



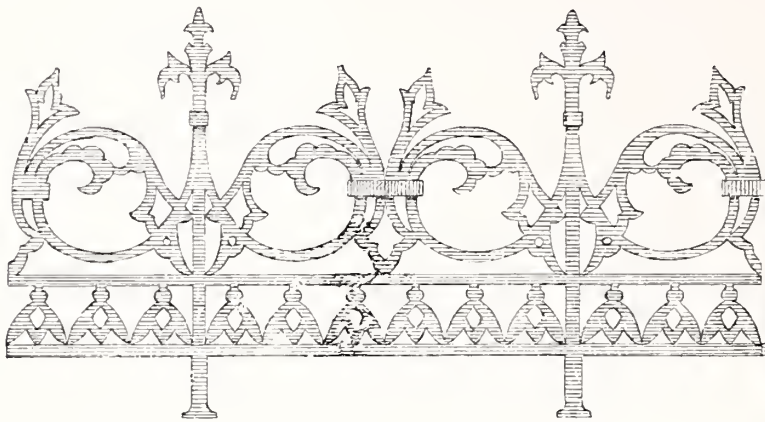
No. 116.  
Cresting 3 feet 5 inches high.  
Finial No. 13, 4 feet 6 inches high.



No. 124.  
2 feet 5 inches high.  
Finial No. 1, 4 feet 10 inches high.

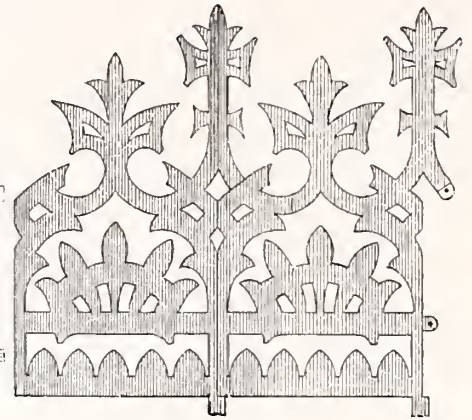


## ROOF CRESTINGS AND FINIALS.



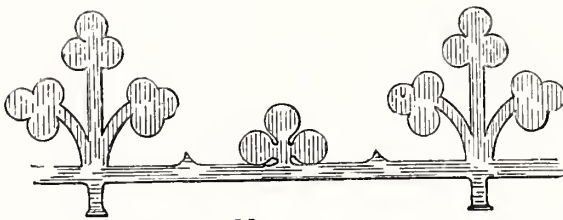
No. 101.

2 feet 2 inches high.



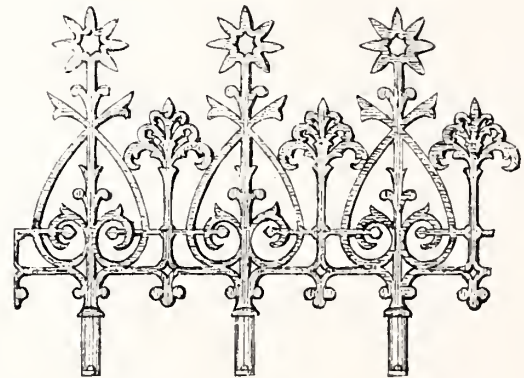
No. 125.

2 feet 2 inches high.



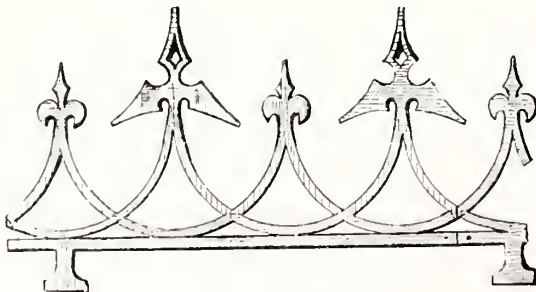
No. 127.

1 foot high.



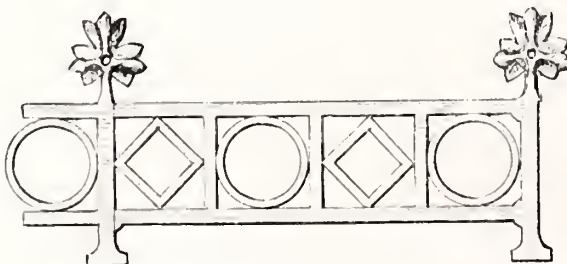
No. 113.

1 foot 8½ inches high.



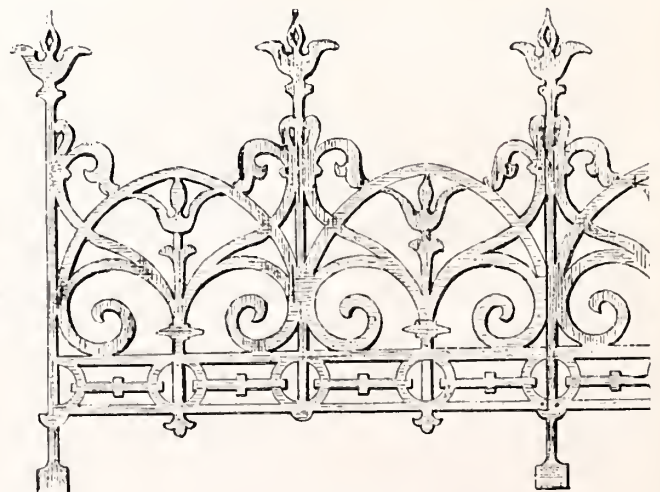
No. 109.

1 foot 3¼ inches high.



No. 105.

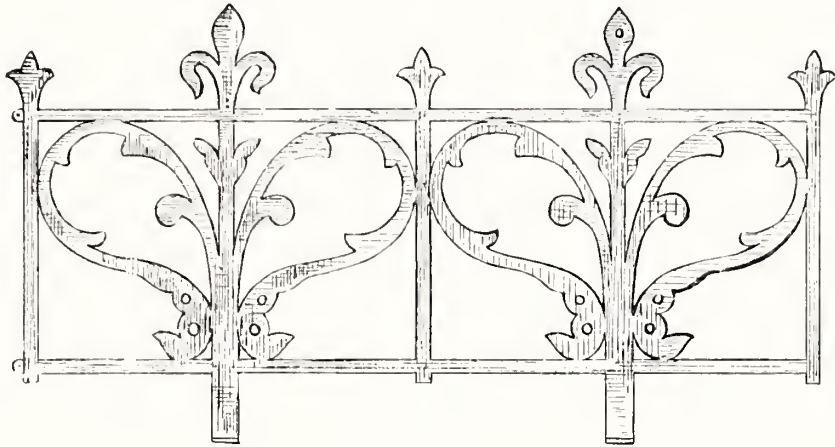
1 foot 1½ inches high.



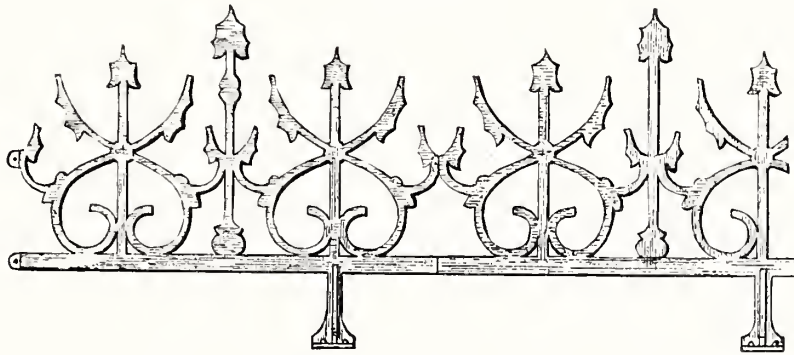
No. 120.

2 feet 2½ inches high.

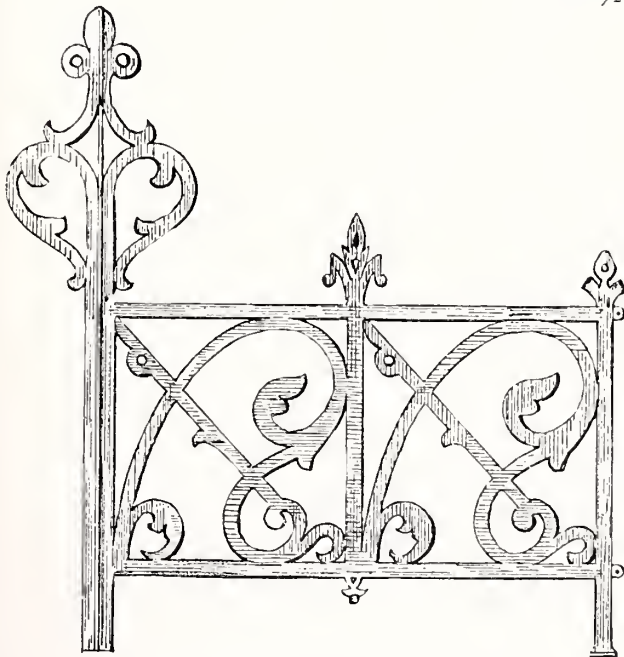
ROOF CRESTINGS AND FINIALS.



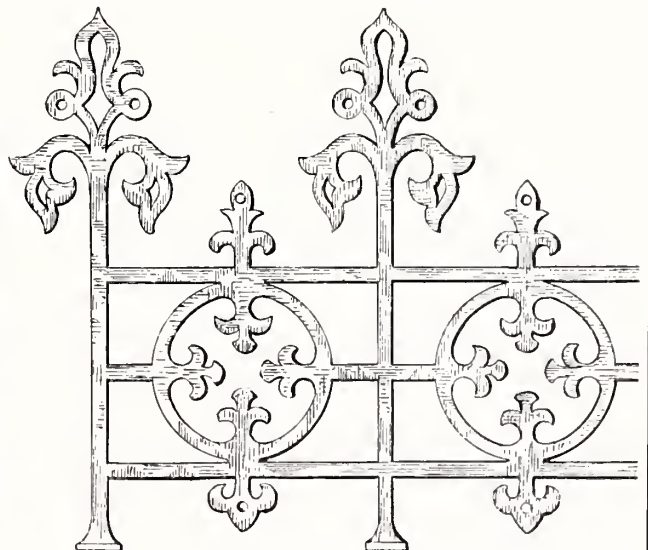
No. 117.  
2 feet high.



No. 123.  
1 foot 6½ inches high.



No. 102.  
Cresting 2 feet high. Finial No. 10.



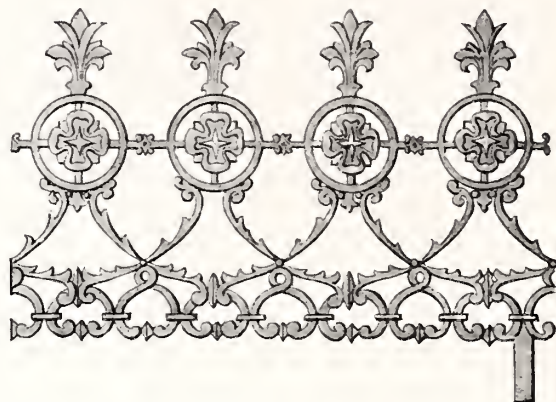
No. 107.  
2 feet 6 inches high.



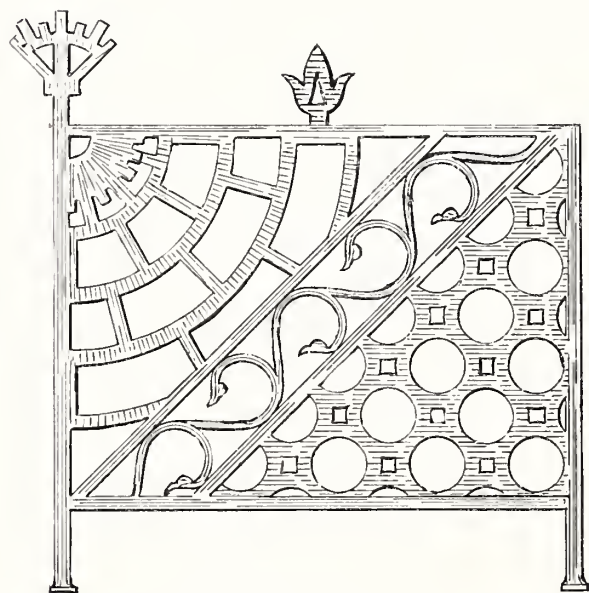
## ROOF CRESTINGS AND FINIALS.



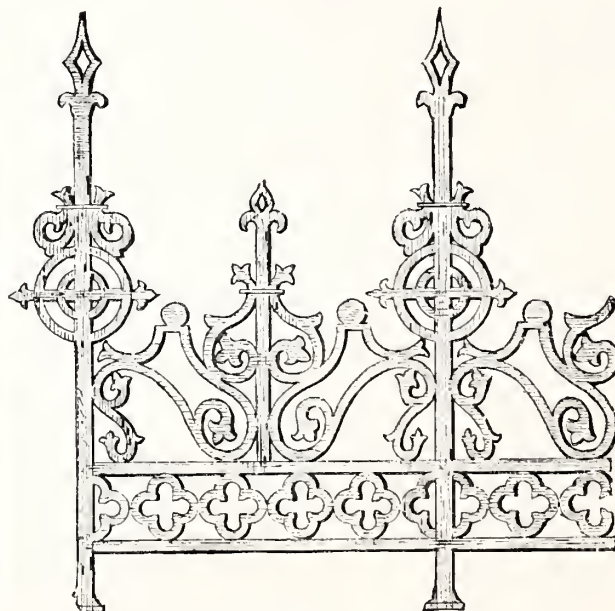
No. 122.  
1 foot 10½ inches high.



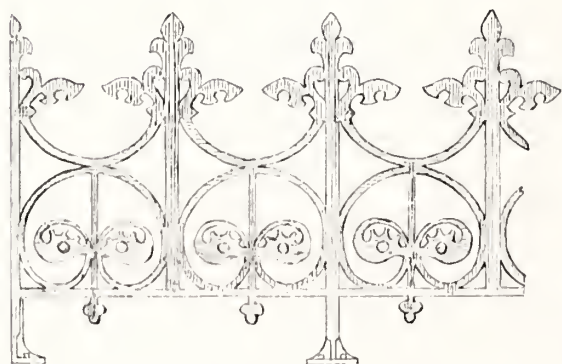
No. 114.  
1 foot 10 inches high.



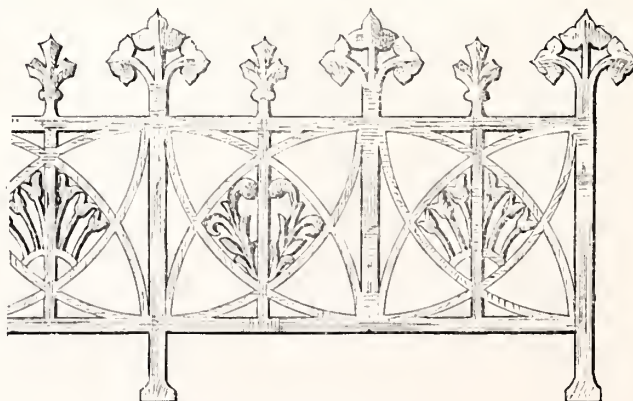
No. 128.  
2 feet 4 inches high.



No. 110.  
2 feet 11½ inches high.

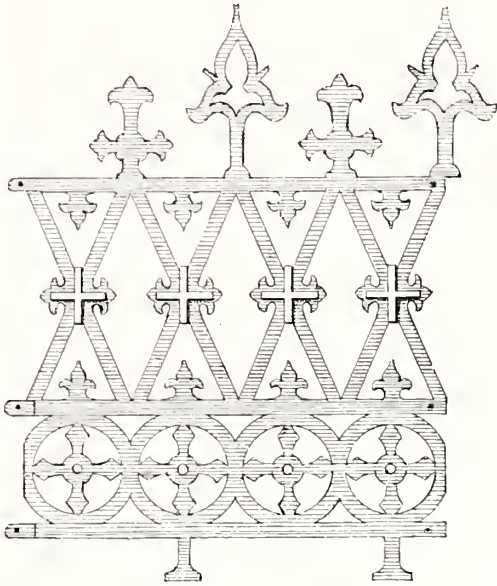


No. 115.  
1 foot 7½ inches high.

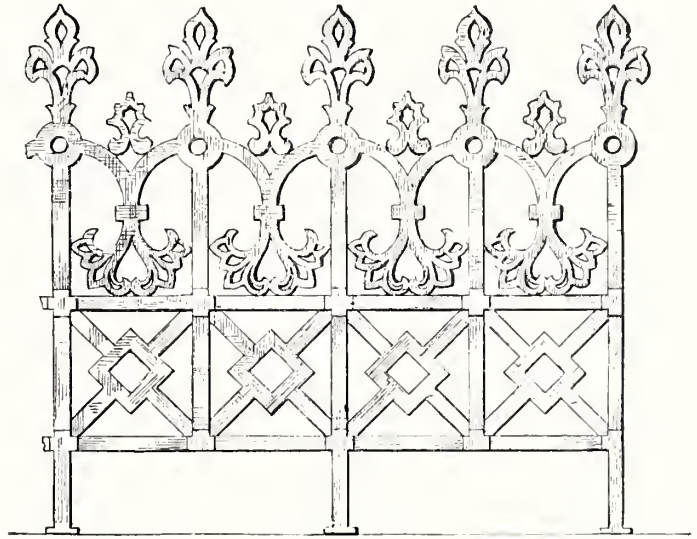


No. 121.  
1 foot 9 inches high.

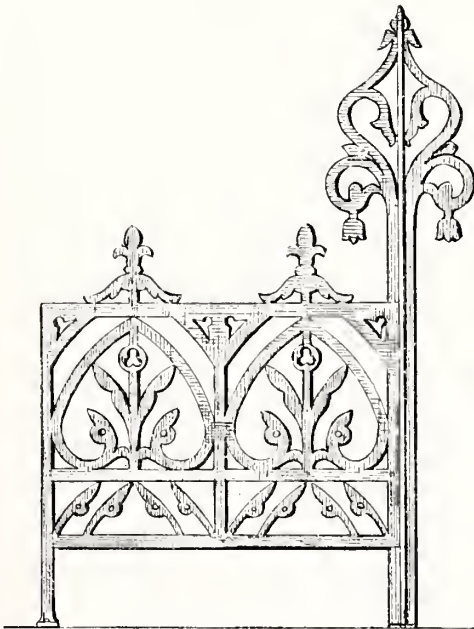
ROOF CRESTINGS AND FINIALS.



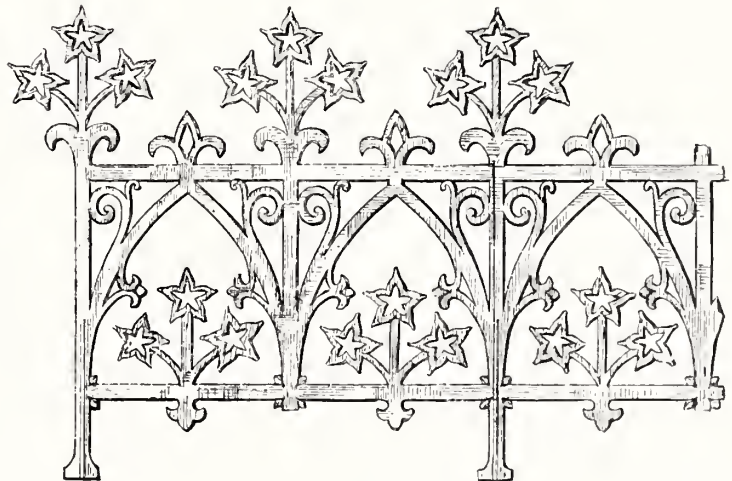
No. 126.  
3 feet high.



No. 111.  
2 feet 4½ inches high.



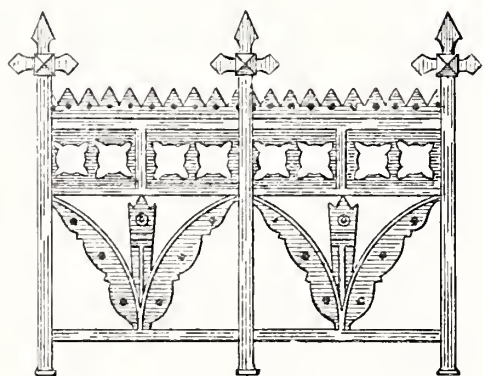
No. 104.  
Cresting 1 foot 10 inches high.  
Finial No. 14, 2 feet 10½ inches high.



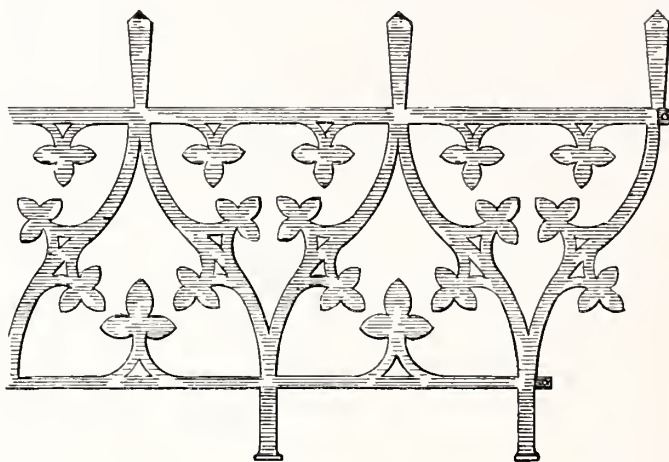
No. 119.  
2 feet 2 inches high.



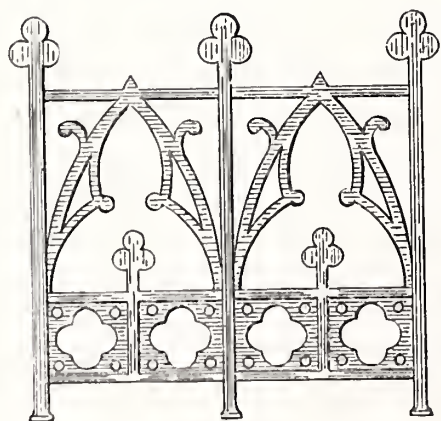
## ROOF CRESTINGS AND FINIALS.



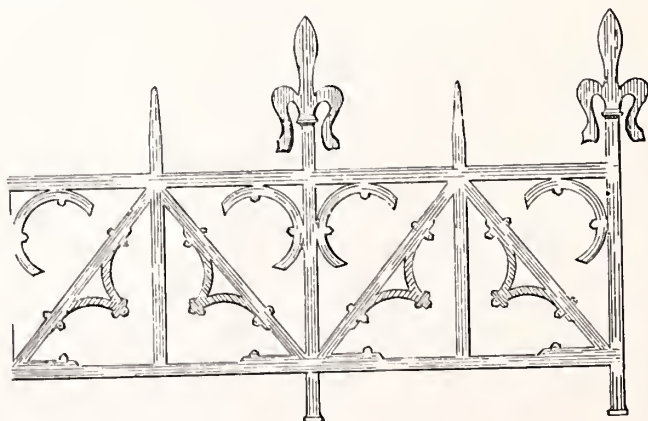
No. 129.  
1 foot 6 inches high.



No. 130.  
1 foot 7 inches high.

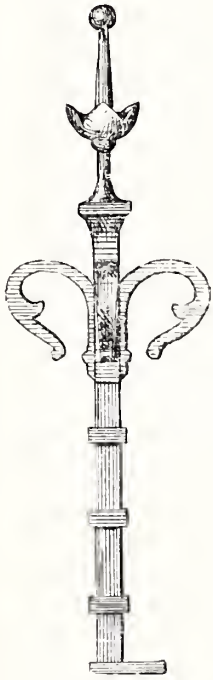


No. 131.  
1 foot 8 inches high.



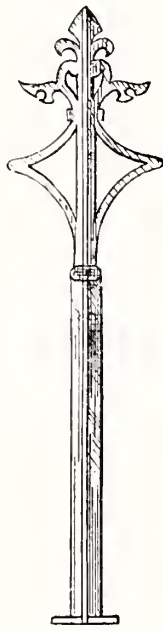
No. 132.  
1 foot 6 inches high.

## FINIALS FOR ROOF CRESTINGS.



No. 18.

2 feet 3½ in.  
high.



No. 8.

2 feet 10 in.  
high.



No. 4.

2 feet 7 in.  
high.



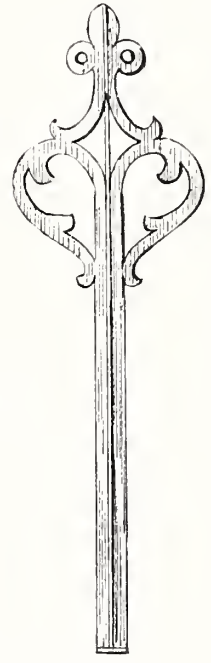
No. 3.

2 feet 4 in.  
high.



No. 6.

3 feet high.



No. 10.

3 feet high.

Finials Nos. 3, 4, 6, 8 and 10 can be used with Crestings Nos. 105, 109, 113, 115, 123, 127, 128, 129, 130, 131 and 132.

Finials Nos. 10 and 16 with Crestings Nos. 101 and 125.

Finials Nos. 5, 11 and 12 with Crestings Nos. 102, 104, 107, 111, 114, 117, 119, 120, 121, 122 and 128.

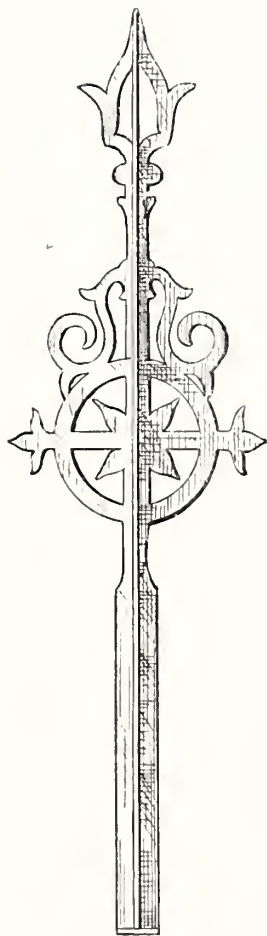
Finial No. 18 with Cresting No. 126.

Finial No. 1 with Cresting No. 124.

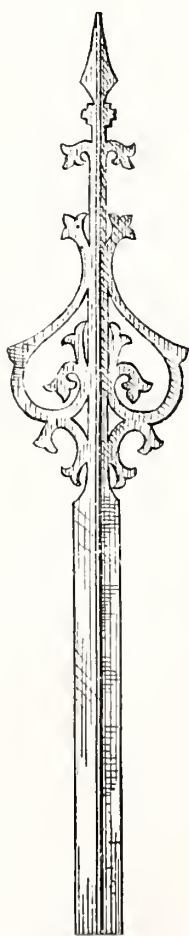
Finial No. 18 with Railings Nos. 52, 53 and 56.



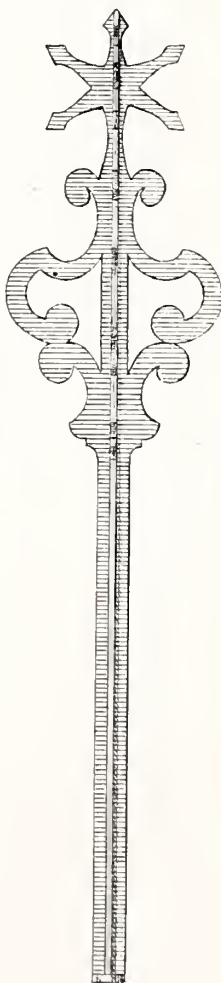
## FINIALS FOR ROOF CRESTINGS.



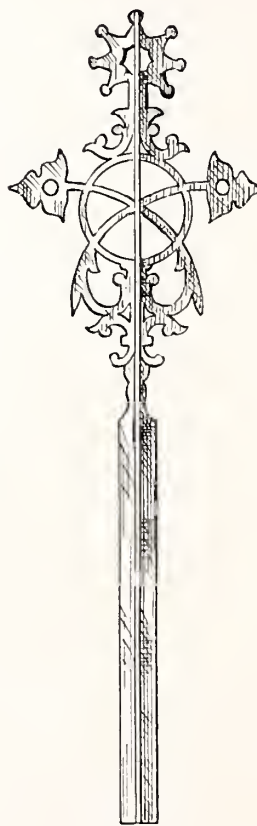
No. 12.  
4 feet 3 in. high.



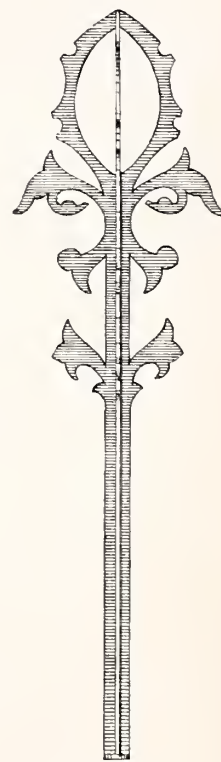
No. 5.  
4 feet  $\frac{1}{2}$  inch  
high.



No. 17.  
4 feet 10 in.  
high.



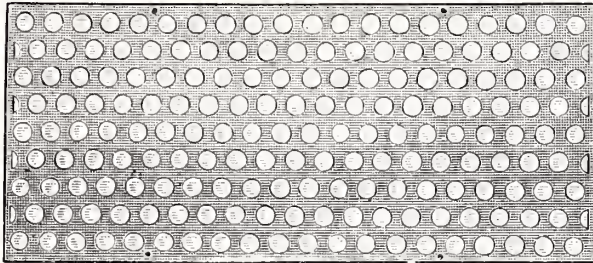
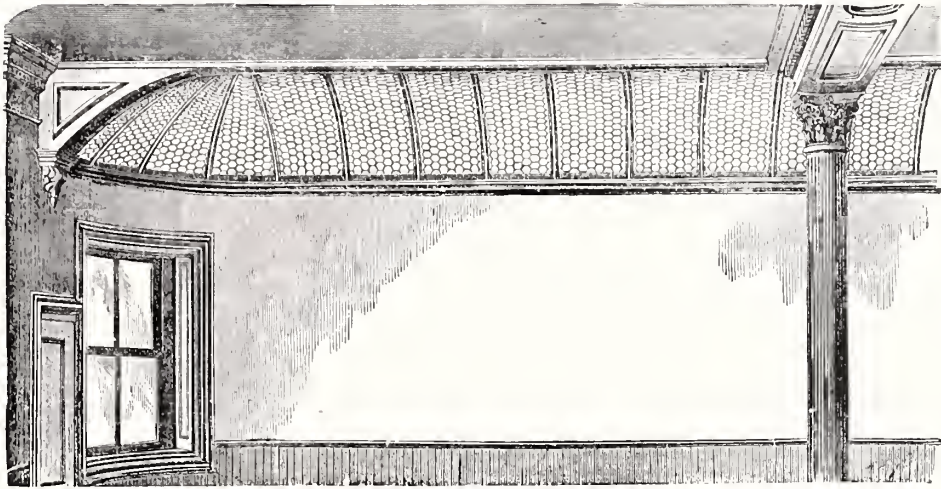
No. 11.  
3 feet 10 in.  
high.



No. 16.  
3 feet 10 in.  
high.

# ILLUMINATING TILES OF ALL KINDS,

For Areas, Skylights, Roofs, Floors, Sidewalks, Etc.



**PATENT CONCRETE TILE,**  
For Sidewalks and Areas.

Lenses,  $\frac{7}{8}$  inch thick, 2 inches diameter.

Sole Licensees and Manufacturers for the States of Missouri, Iowa,  
Kansas and Nebraska, of the Celebrated

## Patent Concrete Illuminating Tiles.

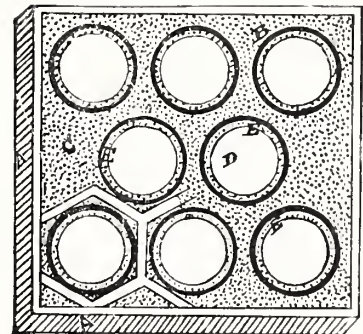
As sole Licensees of the various kinds of the Celebrated Patent Concrete Illuminating Tile, we take pleasure in calling attention to its merits over all other makes, for its smooth, non-slippery surface, superior illuminating qualities, cleanliness and beauty of appearance, superior strength, durability, etc.

It is preferred to any other kind wherever it has been introduced.

Prices and estimates furnished on application.  
All orders will receive prompt attention.

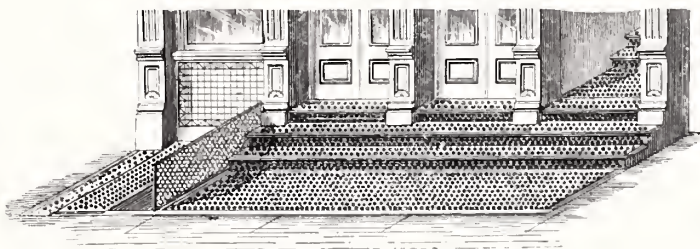
**Jacob's**  
**Detachable Ring Concrete**  
**Illuminating Tile.**

Patented Aug. 31, 1880.



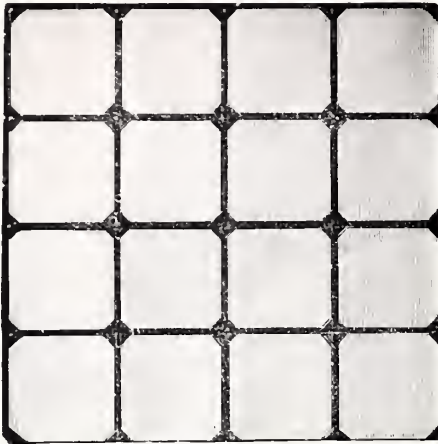
A—The Iron Tile B.—The Detachable Ring. C—  
The Concrete. D.—The Glass Lens. E—The  
Plastic Filling.  
Lens  $\frac{7}{8}$  inch thick, 2 inches diameter.

The Glass is set with Brimstone or other Plastic Cement into a brass or copper ring, after which the glasses and rings are inserted into the Concrete Tile. This method, covered by Patent, protects the glasses against action of the weather, effectively preventing them from chipping or breaking from natural causes.

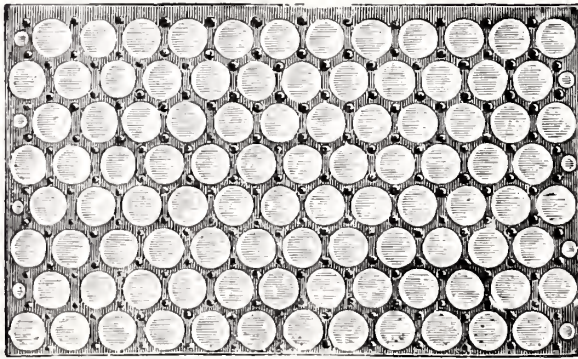




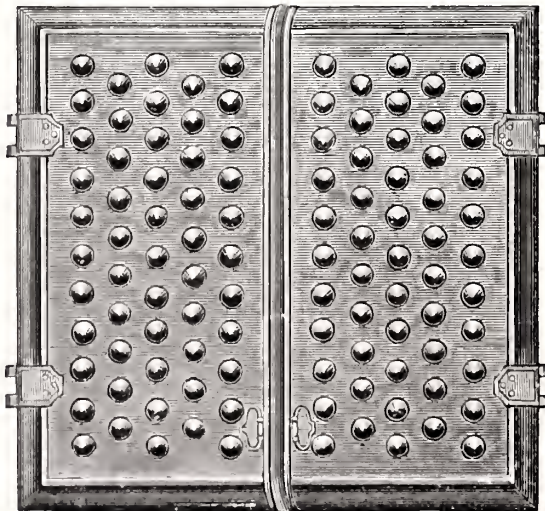
FOR TABLES OF STRENGTH OF WROUGHT IRON BEAMS SEE PAGE 96.



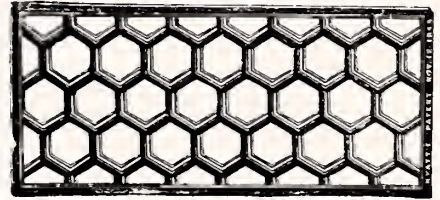
Patented April 12, 1881.  
10x10 Inch Octagon. For Floor Lights.



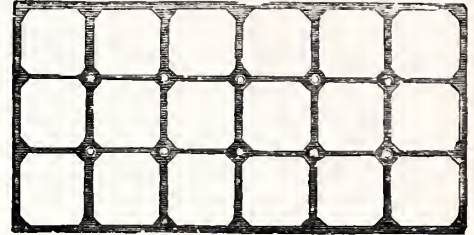
The Old Well-Known Knob Protected Hyatt's Patent Tile.  
 $\frac{7}{8}$  Inch Thick.  $1\frac{1}{4}$  Inch Lens.



Patented March 30, 1880.



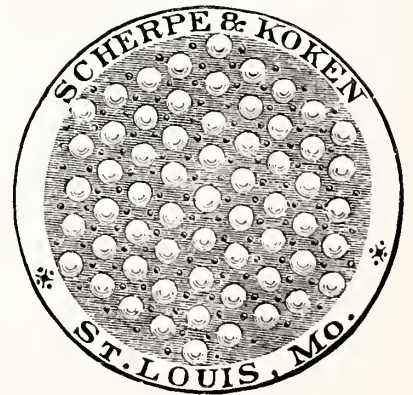
3 Inch Hexagon. For Floors, Skylights, Etc.



Octagon Lights. Lens, 5 Inches in Diameter.



Patent Prismatic Lenses. For Throwing  
Light at an Angle, thus Illuminating  
rear parts of Basements.



Illuminating Vault Covers of all Sizes.  
Bull's Eye, Knob Protected or Concrete. Also  
all kinds of open or solid Cast  
Iron Covers.

### Jacob's Patent Wrought Iron Illuminating Door and Roofing Plate.

For Doors to cover Sidewalks, Elevators, Areas,  
Steps and Hatchways; for Fire and Burglar Proof  
Illuminating Window Shutters; also, for Illuminating  
Roofs. Is unexcelled for lightness, strength and dura-  
bility.

Is much lighter to handle than the Cast-Iron Illum-  
inating Doors, and, unlike them, can not be broken  
by the roughest usage.

## TABLES OF STRENGTH OF CAST IRON COLUMNS.

Based upon "Gordon's Rules."

The weights are given in tons of 2,000 pounds avoirdupois, which can be borne with safety when the ends of columns are dressed or turned at right angles to their axis. The ends of all our columns are turned and trued on lathes.

 $\frac{1}{2}$  INCH METAL.

## DIAMETER IN INCHES.

LENGTH IN FEET.	4	5	6	7	8	9	10	11	12
8.....	18.1	29.22	41.80	55.32	69.45	83.95	98.70	110.65	124.76
10.....	14.5	23.32	34.35	46.55	59.05	73.37	87.5	101.69	115.80
12.....	10.62	18.92	28.47	39.37	51.32	64.07	77.32	92.51	106.40
14.....	8.17	15.45	23.90	33.57	44.37	56.	68.53	83.32	97.21
16.....	6.52	12.30	20.47	28.85	38.58	49.28	60.83	74.81	88.25
18.....	5.33	10.	16.78	25.63	33.78	43.52	54.15	67.20	79.96
20.....	4.45	8.43	14.02	21.43	30.83	38.65	48.43	60.48	72.35

 $\frac{3}{4}$  INCH METAL.

LENGTH IN FEET.	4	5	6	7	8	9	10	11	12
8.....	23.70	39.68	59.05	77.97	98.95	120.58	142.60	159.58	182.13
10.....	18.38	31.45	47.40	65.30	84.62	104.97	126.	148.22	169.12
12.....	13.47	25.40	39.13	55.	72.52	91.35	111.18	135.78	155.17
14.....	10.37	20.25	32.73	46.70	62.50	79.75	98.15	121.71	141.6
16.....	8.27	16.15	27.50	40.	54.20	69.93	86.90	108.19	128.62
18.....	6.77	13.25	22.50	34.97	47.35	61.63	77.25	97.37	116.23
20.....	5.65	11.	18.83	29.25	42.60	54.63	68.95	87.63	105.61

## 1 INCH METAL.

LENGTH IN FEET.	4	5	6	7	8	9	10	11	12
8.....	27.5	47.73	71.45	97.52	125.12	153.72	182.95	207.2	238.39
10.....	20.73	37.57	58.	81.23	106.52	133.32	161.18	191.8	221.30
12.....	15.20	30.20	47.65	68.12	90.97	115.65	141.75	175.7	203.56
14.....	11.70	23.62	39.70	57.67	78.15	100.67	124.85	154.	185.76
16.....	9.32	18.82	32.80	49.30	67.60	88.05	110.30	140.	168.73
18.....	7.62	15.43	26.85	42.40	58.92	77.45	97.85	126.	152.47
20.....	6.37	12.87	22.45	35.45	52.25	68.55	87.20	113.4	138.54

 $1\frac{1}{4}$  INCH METAL.

LENGTH IN FEET.	4	5	6	7	8	9	10	11	12
8.....	29.85	53.65	82.25	114.20	148.10	183.50	219.80	253.67	292.60
10.....	21.95	42.	66.38	94.55	125.55	158.55	193.	234.82	271.70
12.....	16.10	33.60	54.33	79.00	106.82	137.10	169.27	215.10	249.85
14.....	12.40	25.82	45.10	66.65	91.47	119.	148.70	192.82	228.
16.....	9.87	20.57	36.65	56.85	78.95	103.85	131.10	171.40	207.10
18.....	8.07	16.85	30.	48.15	68.67	91.17	116.10	154.26	187.15
20.....	6.75	14.07	25.07	40.25	60.07	80.55	103.30	141.40	170.05

 $1\frac{1}{2}$  INCH METAL.

LENGTH IN FEET.	4	5	6	7	8	9	10	11	12
8.....	31.15	57.80	90.70	127.92	168.02	210.02	253.27	296.	341.88
10.....	22.50	45.00	72.80	105.50	141.82	180.80	221.67	274.	317.46
12.....	16.50	35.85	59.33	87.77	120.25	155.82	193.85	251.	291.93
14.....	12.70	27.15	49.12	73.85	102.67	134.90	169.87	227.	266.40
16.....	10.12	21.62	39.30	62.83	88.40	117.45	149.45	202.	242.
18.....	8.27	17.70	32.17	52.47	76.75	102.94	132.10	180.	218.67
20.....	6.92	14.80	26.90	43.88	66.25	90.78	117.37	165.	198.69



# TABLE OF STRENGTH OF WROUGHT IRON BEAMS.

As given by "Union Iron Mills."

The weight is given in tons of 2,000 pounds avoirdupois, and is supposed to be equally distributed over the whole Beam.

HEIGHT OF BEAMS.		FEET BETWEEN BEARINGS.															
		10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3 inches	Light.....	.82	.69	.59													
	Heavy.....	.94	.79	.67													
4 inches	Light.....	1.24	1.03	.89	.78	.69											
	Heavy.....	1.40	1.17	1.00	.88	.78											
5 inches	Light.....	1.98	1.65	1.41	1.24	1.10	.99	.90	.82								
	Heavy.....	2.28	1.90	1.63	1.42	1.26	1.14	1.03	.95								
6 inches	Light.....	3.26	2.72	2.33	2.04	1.81	1.63	1.48	1.36	1.26	1.17						
	Heavy.....	3.79	3.16	2.71	2.37	2.11	1.90	1.72	1.58	1.46	1.35						
7 inches	Light.....	5.24	4.37	3.74	3.28	2.91	2.62	2.38	2.18	2.02	1.87						
	Heavy.....	6.20	5.17	4.43	3.88	3.44	3.10	2.82	2.58	2.38	2.21						
8 inches	Light.....	7.00	5.83	5.00	4.38	3.89	3.50	3.18	2.92	2.69	2.50	2.33	2.19	2.06			
	Heavy.....	9.04	7.53	6.46	5.65	5.02	4.52	4.11	3.77	3.48	3.23	3.01	2.83	2.66			
9 inches	Light.....	8.68	7.23	6.20	5.43	4.82	4.34	3.95	3.62	3.34	3.10	2.89	2.71	2.55	2.41	2.28	
	Heavy.....	10.40	8.67	7.43	6.50	5.78	5.20	4.73	4.33	4.00	3.71	3.47	3.25	3.06	2.89	2.74	
10 inches	Light.....	12.00	10.00	8.57	7.50	6.67	6.00	5.45	5.00	4.62	4.29	4.00	3.75	3.53	3.33	3.16	
	Heavy.....	15.00	12.50	10.71	9.38	8.33	7.50	6.82	6.25	5.77	5.36	5.00	4.69	4.41	4.17	3.95	
10½ inches	Light.....	12.56	10.47	8.97	7.85	6.98	6.28	5.71	5.23	4.83	4.49	4.19	3.93	3.69	3.49	3.31	
	Heavy.....	15.32	12.77	10.94	9.58	8.51	7.66	6.96	6.38	5.89	5.47	5.11	4.78	4.51	4.26	4.03	
12 inches	Light.....	18.36	15.30	13.11	11.48	10.20	9.18	8.35	7.65	7.06	6.56	6.12	5.74	5.40	5.10	4.83	
	Heavy.....	22.68	18.90	16.20	14.18	12.60	11.34	10.31	9.45	8.72	8.10	7.56	7.09	6.67	6.30	5.97	
15 inches	Light.....	28.24	23.53	20.17	17.65	15.69	14.12	12.84	11.77	10.86	10.09	9.41	8.83	8.31	7.84	7.43	
	Heavy.....	36.12	30.10	25.80	22.58	20.07	18.06	16.42	15.05	13.89	12.90	12.04	11.29	10.62	10.03	9.51	
20 inches	Extra Heavy.....	40.00	33.33	28.57	25.00	22.22	20.00	18.18	16.67	15.38	14.29	13.33	12.50	11.70	11.11	10.53	
	Light.....	49.15	41.25	35.36	30.94	27.50	24.75	22.50	20.63	19.04	17.68	16.50	15.47	14.55	13.75	13.02	12.38
	Heavy.....	66.00	55.00	47.65	41.25	36.66	33.00	30.00	27.50	25.38	23.83	22.00	20.63	19.94	18.33	17.36	16.50

## WEIGHTS OF VARIOUS MATERIALS

Used in Construction of Buildings.

	Per Cubic Foot,	54 Lbs.
Loose Common Cement.....	"	96
Loose Portland Cement.....	"	96
Earth, Loose.....	"	75
Clay.....	"	128
Clay and Stones.....	"	160
Common Window Glass.....	"	157
Limestone.....	"	156
Marble.....	"	172
Quick Lime.....	"	95
Masonry, Fresh.....	"	160
Masonry, Dry.....	"	125
Brickwork.....	"	125
Sand, Dry.....	"	98
Sand, Wet.....	"	130
Slate.....	"	175
Ash Timber.....	"	38
Chestnut.....	"	41
Hickory.....	"	53
Maple.....	"	49
Oak, Common.....	"	59
Oak, White.....	"	51
Oak, Red.....	"	38
Pine, White.....	"	25
Pine, Yellow.....	"	34½
Walnut.....	"	38
Spruce.....	"	25

Green Timber One-Half Heavier Than Dry.

















